Material Planning

The PowerLink options for MRP, VPI and Thru-Put planning

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Material Planning Introduction

- With Release 9.1 of XA, Infor created a new XA application, ‘Material Planning’
- The purpose of Material Planning is to bring planning functions into PowerLink
- Everyone with an MRP, VPI or Thru-Put license is entitled to a Material Planning License key **at no additional charge**
  - However, you must request the license key from Infor, they do not supply it automatically

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Material Planning Introduction

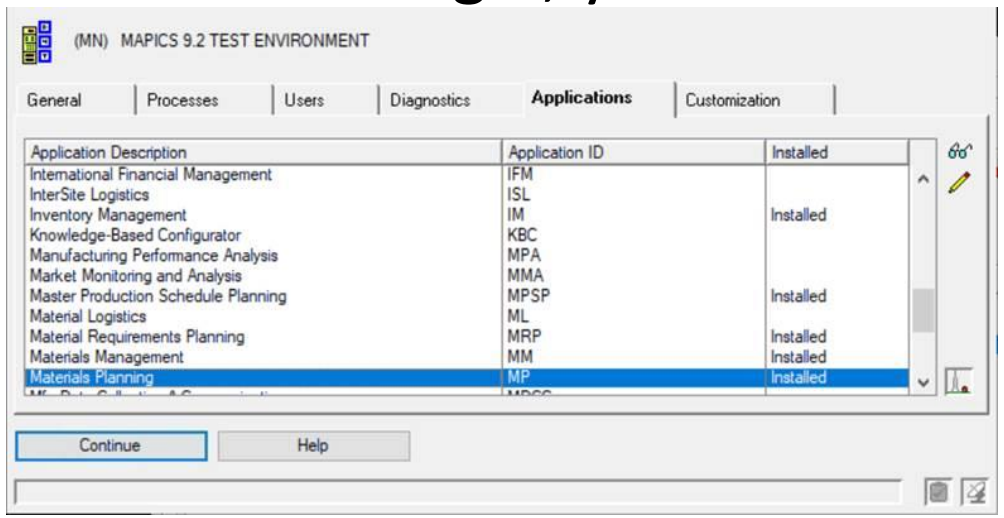
- At release 9.1, after receiving and applying the Material Planning license key there are 2 PTF's that need to be applied:
  - SH49406
    - Horizon Values
    - Period Intervals
    - Planning Execution Options
    - Planning Run (Host Job – MRP only)
    - Report Options
  - SH50147
    - Item Requirements Inquiry brought into Item Warehouse as new 'Planned Activity' overview card
  - At R9.1, you need to be at level 3.37 or higher of the client/PowerLink
- At release 9.2, installing the license key should be all you need to do. If you do not see the planning fields in the warehouse card you may need to run MRP install/tailor

Material Planning License Key

- The license key is entered using the ADDLICKEY command on the green screen of the iSeries. You can also do a WRKLICINF PRDID('5I*') and scan for the correct product and term

```
                  License
Opt   Product     Term          Feature   Description
__    5I33M7X     V2R9           5143     QRMS - Quality Reporting and Mgmt System
__    5I33M7X     V2R9           5144     AM+  - Accounting Management Plus
__    5I33M7X     V2R9           5145     CMS  - Coil Management Solutions
__    5I33M7X     V2R9           5146     EFIN - Enterprise Financials
__    5I33M7X     V2R9           5147     MCMI - Maintenance & Calibration Mgmt
__    5I33M7X     V2R9           5148     MP   - Materials Planning
__    5I33M7X     V2R9           5149     Infor reserved
                                                                          More
```

- In Link Manager, you need to turn on the install flag for the application



XA Planning Engines

Material Requirements Planning (MRP)

- MRP is the oldest of the 3 planning software options
- 5 steps to a planning run
  - Gather all the requirements for an item and put them in date sequence
  - Net the requirements against the quantity on hand and on order
    - Generate Expedite, Defer and Cancel messages when dates on orders do not align to the date of the requirement
  - Create Planned Orders where on hand/on order does not satisfy requirements
  - Calculate the Start Date of the planned order using the Lead Time
    - If the start date is before the MRP Current Date, add a '31 Release & Expedite' message
    - If the start date is before the MRP Release Date, add a '51 Release' message
  - M-Plan Orders generate 'Peg To' requirements to the components of the BOM
    - Start date of the M-Plan will be the 'Required date' of the Peg To Requirement

Item Requirements Inquiry

```
AMM511                        Item Requirements Inquiry

Item . : 1101                 Laptop                  Item types . : EXPLICIT
Planning WHS . : 1            Start date : 12/14/19   Current date :  4/23/20
Planner number :              Vendor . . :            Available  . :     9,888.000
Position to date  . . . .
                                                                      More:   +
-------Requirements------ -----------Orders------------   Projected
Due Date    Quantity  TYP Start DT    Quantity   REFER     Balance   Exception
 1/13/20      10.000  CMH                                  9878.000
 1/13/20      10.000  CMH                                  9868.000
 2/04/20       5.000  CMH                                  9863.000
 4/08/20       5.000  CMH                                  9858.000
 4/23/20    1000.000  *SF                                  9858.000
 5/01/20    5000.000  MNL                                  4858.000
 6/01/20    8000.000  MNL  5/18/20    5000.000  M-PLAN     1858.000
 7/01/20   10000.000  MNL  6/17/20   10000.000  M-PLAN     1858.000
 7/31/20              MNL  7/17/20   10000.000  M-PLAN    11858.000
 8/01/20   10000.000  MNL                                  1858.000
 9/01/20   10000.000  MNL  8/18/20   10000.000  M-PLAN     1858.000
10/01/20    7500.000  MNL  9/17/20    7000.000  M-PLAN     1358.000

F1=Select by planner   F2=Select by item   F4=Peg to         F6=Next item
F7=Previous item       F18=Refresh         F21=Item detail   F24=Exit
```

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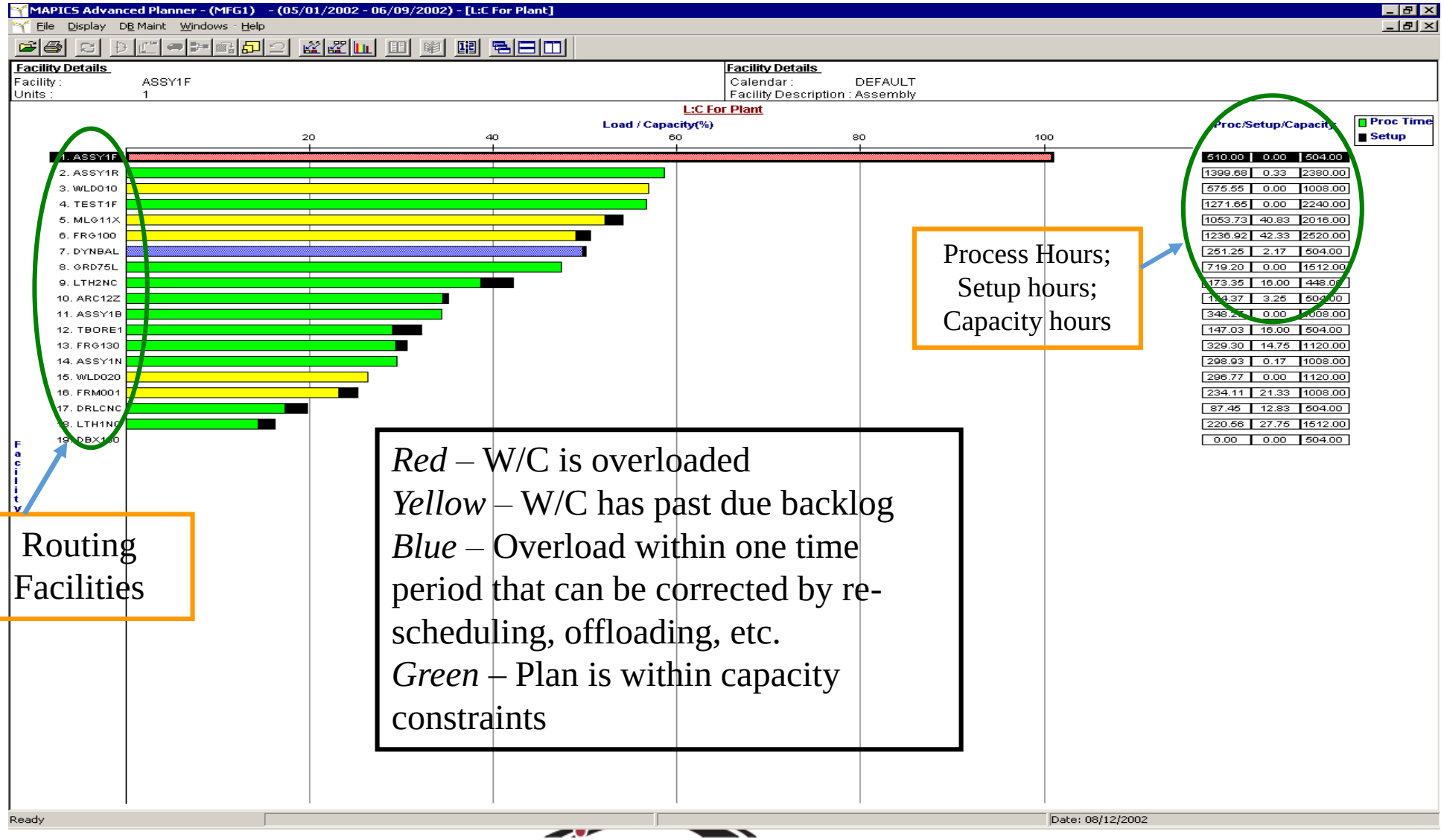
Visual Planner (VPI)

- VPI introduced Capacity Planning with Material Planning
- Download all required XA files to an Access database on a PC or Server
- Lead Times for make items are ignored and VPI uses the item's routing or Item/Line file (Repetitive) to backward schedule work center load and calculate the start date of the M-Plan order.
- Will overload a work center's capacity
- Designed for the Master Scheduler to review capacity load and material shortages prior to saving the plan back to the iSeries/AS400 XA files
  - Updates the Planned Order (PLNORD) and Requirements (REQMTS) files so 'Item Requirements Inquiry' can be used same as MRP
  - Updates MO **Operation** Start/Due dates on released MO's if moved for capacity. Tailoring specifies if Order Start/Due date is updated.
  - Does not update PO Item start/due dates on existing orders

Visual Planner (VPI) Load to Capacity



Routing Facilities

Process Hours; Setup hours; Capacity hours

Red – W/C is overloaded
Yellow – W/C has past due backlog
Blue – Overload within one time period that can be corrected by re-scheduling, offloading, etc.
Green – Plan is within capacity constraints

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Thru-Put

- Thru-Put uses the theory of constraints (i.e. the book *The Goal*) to limit the manufacturing orders going through a constraining work center (called a 'drum')
- Customer Orders and forecasts are the driving requirements
- Schedules material and labor to maximize output of drum work centers and optionally updates scheduled ship dates on CO line items based on production schedule
- Will not overload a work center

ThruPut Integration with MAPICS XA

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Material Planning

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Warehouse Master

- Warehouse Master has a new ‘Planning’ card that replaces MRP menu choices from the ‘Planning Run Options’:
  - Planning Run Execution Options
    - Used by all 3 planning applications
  - Maintain Horizon values
    - Used by all 3 planning applications
  - Planning Run Report Options
    - Used by MRP
  - Maintain Period Intervals
    - Used by MRP
- Has Host Job to launch an MRP Planning Run

1 PPS WAREHOUSE

General | Accounting | Addresses | Planning

Execution Options

Combine customer backlog orders	☐	Minimum days to reschedule orders	0	Warehouse reschedule	Cannot auto reschedule	Cancel exception	Do not reschedule
Time-phased allocations	☑	Rescheduling frozen zone	0	Due in past - M.O.	Do not reschedule	Contract for auto release	Required
Level to plan master level items	2	Maximum demand sources to track	999	Due in past - P.O.	Do not reschedule	Extract requisitions	No
Clear quantity sold with extract	☐	Track demand for quantity on hand	☐	Due in past - Schedule	Do not reschedule	Safety stock lead time	Current date

Reporting

Requirements planning	☐	MLI requirements vs forecast customer orders	☐
Items selected		Purchase planning	☐
Items to include		Order recommendation by item	☑
Date interval		Order recommendation by exception	☐
Order exception days	0	Reschedule activity	☐

Horizon Values

Current date	04/23/2020		
Overdue days	99	Horizon start	12/14/2019
Release days	5	Release	04/30/2020
Allocation days	0	Allocation	04/23/2020
Review days	60	Review	07/16/2020

Combine Interval Days

Interval 1	10	Interval 3	22
Interval 2	15	Intervals 4 thru 9	5

Price Break Literals

Literal 5		Literal 8	
Literal 6		Literal 9	
Literal 7			

Report Code 1 Period Intervals

1	1	12/14/2019	2	1	12/15/2019	3	1	12/16/2019	4	1	12/17/2019	5	1	12/18/2019	6	5	12/19/2019	7	5	12/24/2019
8	5	12/29/2019	9	5	01/03/2020	10	5	01/10/2020	11	5	01/17/2020	12	5	01/24/2020	13	10	01/31/2020	14	10	02/14/2020
15	22	02/28/2020	16	22	03/31/2020	17	22	04/30/2020	18	22	06/01/2020	19	22	07/01/2020	20	22	07/31/2020			

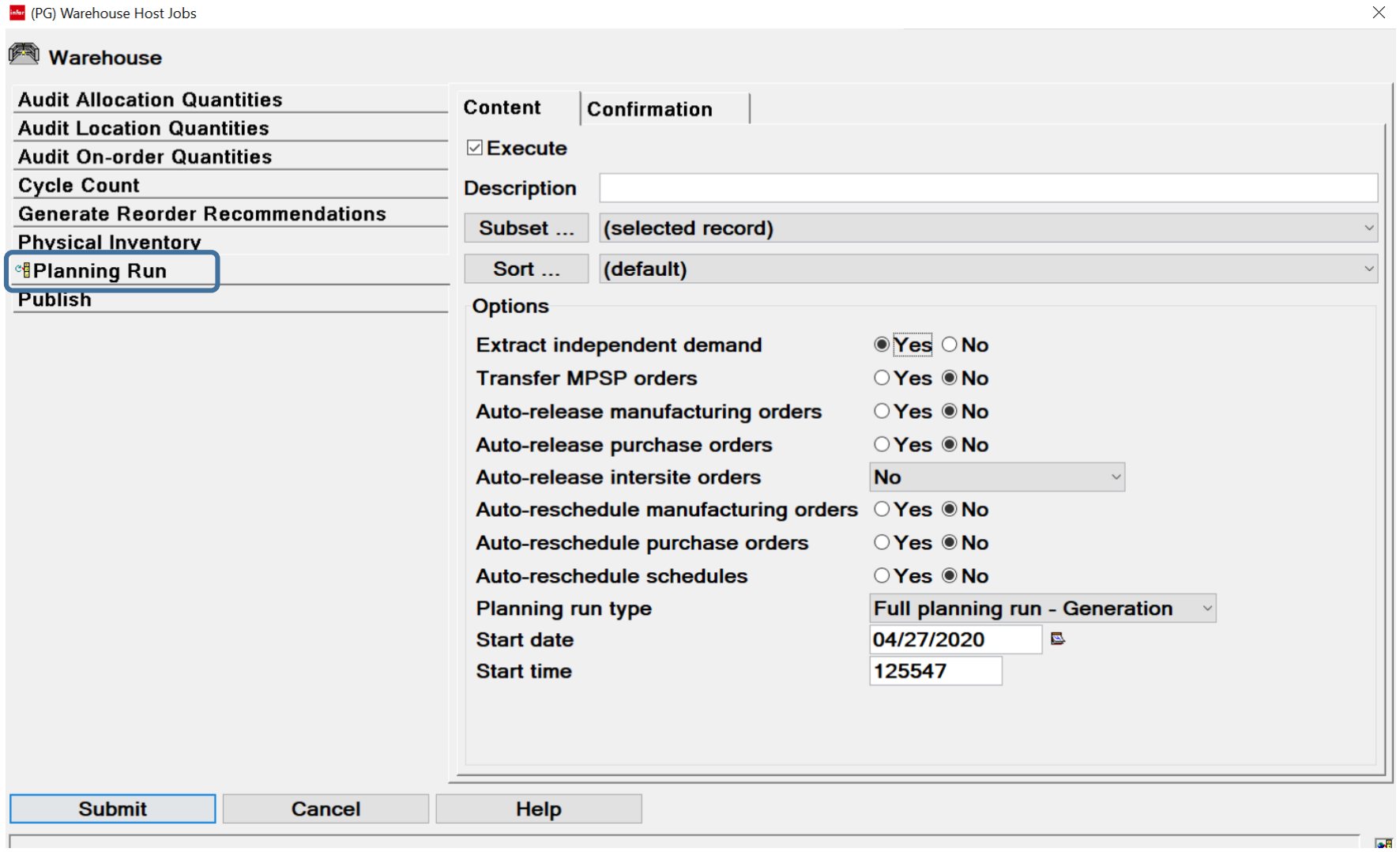
Report Code 2 Period Intervals

1	5	12/14/2019	2	5	12/19/2019	3	5	12/24/2019	4	5	12/29/2019	5	10	01/03/2020	6	10	01/17/2020	7	10	01/31/2020
8	10	02/14/2020	9	10	02/28/2020	10	10	03/13/2020	11	22	03/27/2020	12	22	04/28/2020	13	22	05/28/2020	14	22	06/29/2020
15	22	07/29/2020	16	66	08/28/2020	17	66	11/30/2020	18	66	03/02/2021	19	66	06/02/2021	20	66	09/02/2021			

Report Code 3 Period Intervals

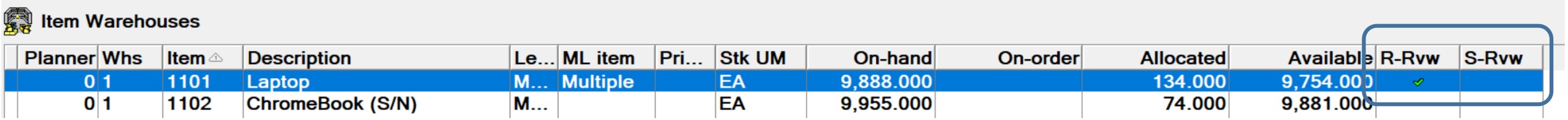
1	5	12/14/2019	2	5	12/19/2019	3	5	12/24/2019	4	5	12/29/2019	5	5	01/03/2020	6	5	01/10/2020	7	5	01/17/2020
8	5	01/24/2020	9	5	01/31/2020	10	5	02/07/2020	11	5	02/14/2020	12	5	02/21/2020	13	5	02/28/2020	14	5	03/06/2020
15	5	03/13/2020	16	5	03/20/2020	17	5	03/27/2020	18	5	04/03/2020	19	5	04/10/2020	20	5	04/17/2020			

Warehouse Host Job to launch MRP run

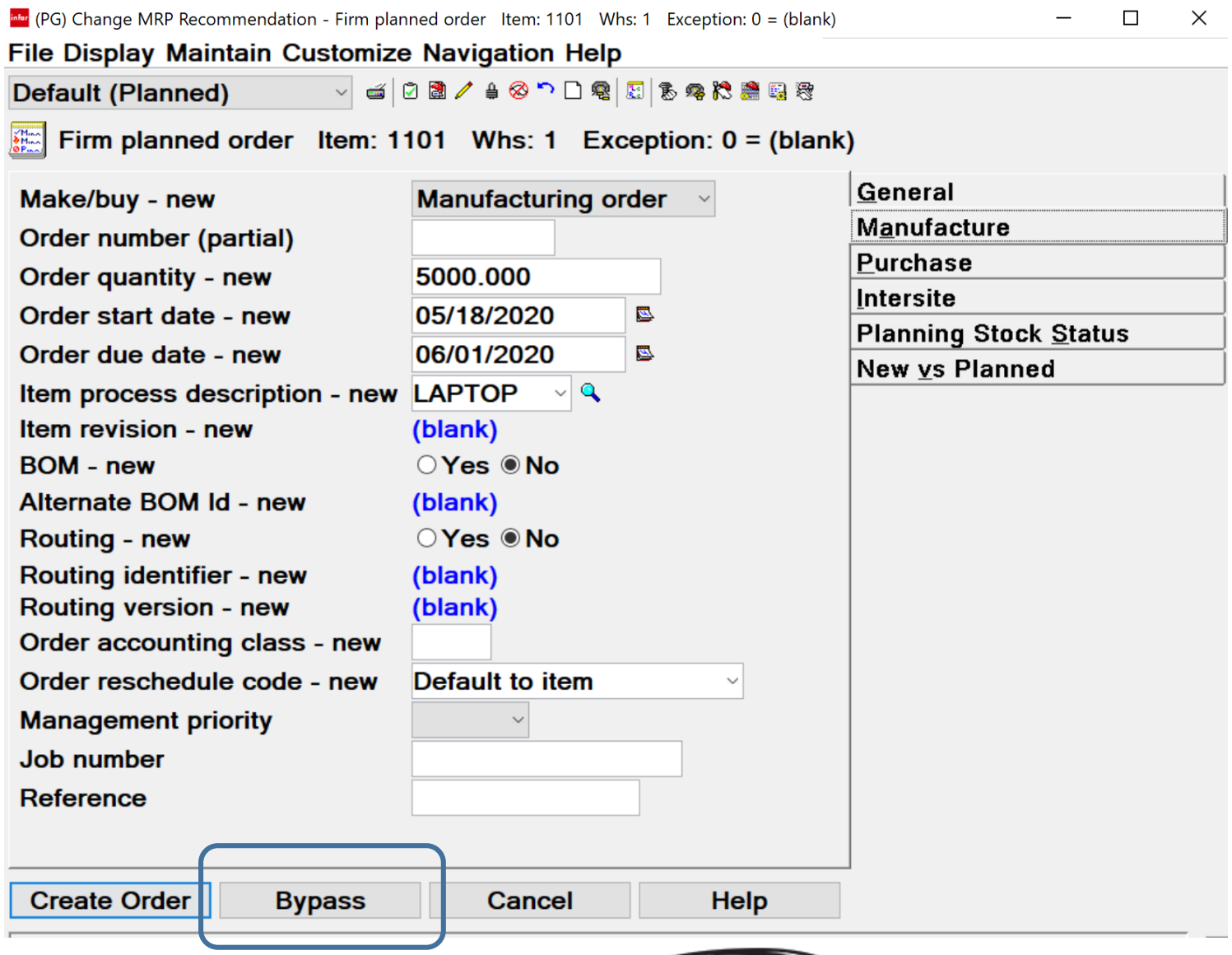


Item Warehouse Records

- A new view has been added to Item Warehouses called ‘Planning’
- It includes 2 new fields:
  - R-RVS – Recommendation Reviewed Show
  - S-RVS – (Master) Schedule Reviewed Show
- If, when working on the planned order from the ‘MRP Recommendations’ object, you click the ‘Bypass’ button, the column will show a check mark



MRP Recommendation Card File



Planned Activity Card

- Infor has created an overview card that shows the ‘Item Requirements Inquiry’ information plus additional:
  - Source of demand – top level requirement that created this requirement
  - For Customer Order requirements, the CO, Line Number and Customer Name
  - Net Change quantity
- If you’re used to working in Item Requirements Inquiry, it takes getting used to the card. At first look, it will appear ‘too busy’

Planned Activity Card - Collapsed

1101 Laptop 1 PPS WAREHOUSE

General | Stock Status | Planning Options | Material Logistics | Materials Planning | Planned Activity

Details: Planned activity

Identification	Due date	Req. qty.	Order qty.	Net change	Projected ...	Exception	Start date	Order	Reference	Demand item	Pare
Activity summary	01/13/2020	20.000		-20.000	9,868.000						
Activity summary	02/04/2020	5.000		-5.000	9,863.000						
Activity summary	04/08/2020	5.000		-5.000	9,858.000						
Activity summary	04/23/2020				9,858.000						
Activity summary	05/01/2020	5,000.000		-5,000.000	4,858.000						
Activity summary	06/01/2020	8,000.000	5,000.000	-3,000.000	1,858.000						
Activity summary	07/01/2020	10,000.000	10,000.000		1,858.000						
Activity summary	07/31/2020		10,000.000	10,000.000	11,858.000						
Activity summary	08/01/2020	10,000.000		-10,000.000	1,858.000						
Activity summary	09/01/2020	10,000.000	10,000.000		1,858.000						
Activity summary	10/01/2020	7,500.000	7,000.000	-500.000	1,358.000						
Activity summary	10/30/2020		9,000.000	9,000.000	10,358.000						
Activity summary	11/01/2020	9,000.000		-9,000.000	1,358.000						
Activity summary	12/01/2020	15,000.000	15,000.000		1,358.000						

1101 Laptop 1 PPS WAREHOUSE

General | Stock Status | Planning Options | Material Logistics | Materials Planning | Planned Activity

Details: Planned activity

Identification	Due date	Req. qty.	Order qty.	Net change	Projected ...	Exception	Start date	Order	Reference	Demand item
Activity summary	01/13/2020	20.000		-20.000	9,868.000					
Activity summary	02/04/2020	5.000		-5.000	9,863.000					
Activity summary	04/08/2020	5.000		-5.000	9,858.000					
Activity summary	04/23/2020				9,858.000					
Activity summary	05/01/2020	5,000.000		-5,000.000	4,858.000					
Activity summary	06/01/2020	8,000.000	5,000.000	-3,000.000	1,858.000					
Requirement		8,000.000								
Firm planned M.O	06/01/2020		5,000.000				05/18/2020			
Source of demar	*06/01/2020*	*4,142.000*						*Manual requirem...*		*1101*
Source of demar	*07/01/2020*	*858.000*						*Manual requirem...*		*1101*
Activity summary	07/01/2020	10,000.000	10,000.000		1,858.000					
Activity summary	07/31/2020		10,000.000	10,000.000	11,858.000					
Activity summary	08/01/2020	10,000.000		-10,000.000	1,858.000					
Activity summary	09/01/2020	10,000.000	10,000.000		1,858.000					
Activity summary	10/01/2020	7,500.000	7,000.000	-500.000	1,358.000					
Activity summary	10/30/2020		9,000.000	9,000.000	10,358.000					
Activity summary	11/01/2020	9,000.000		-9,000.000	1,358.000					
Activity summary	12/01/2020	15,000.000	15,000.000		1,358.000					

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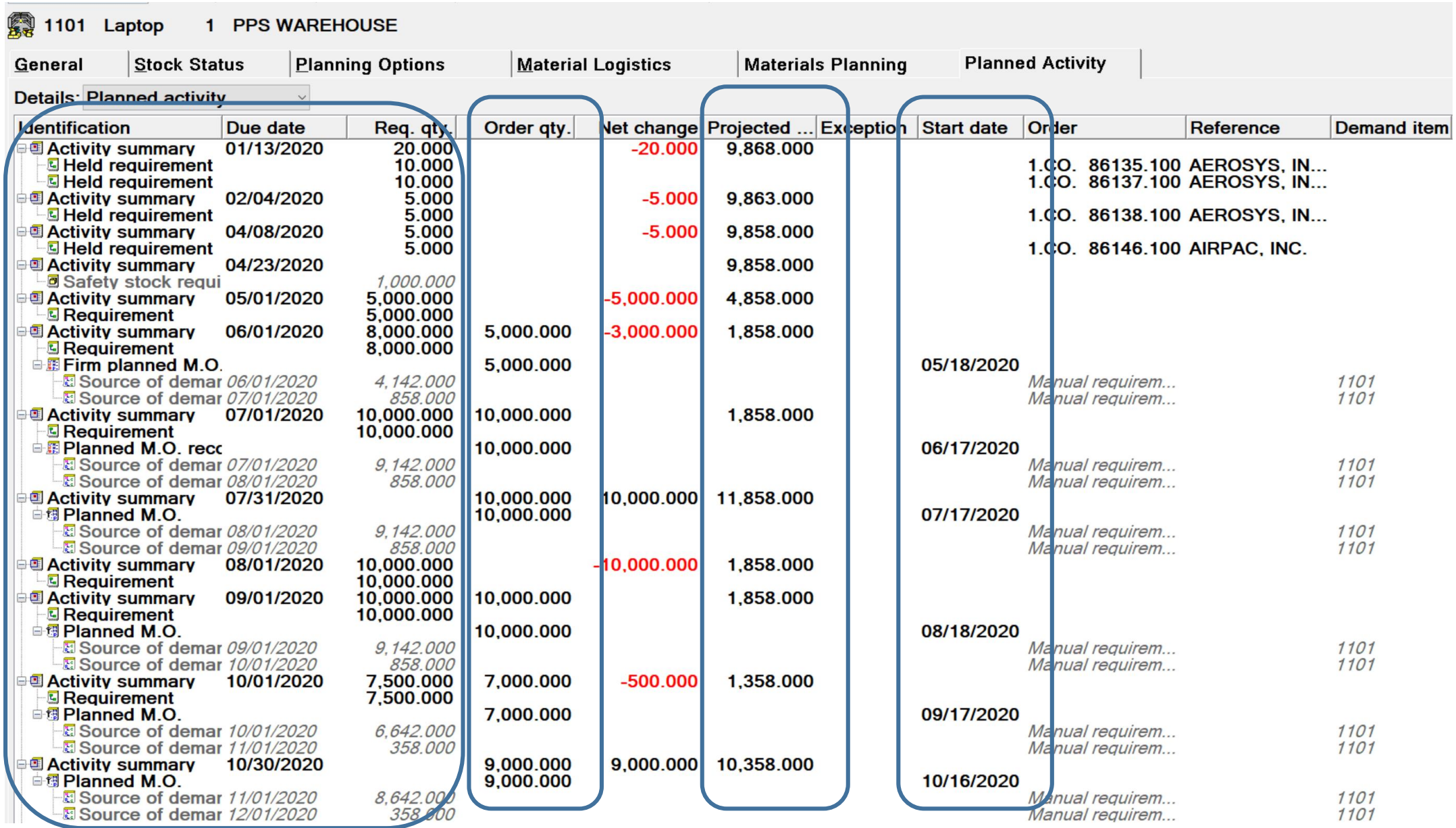
Planned Activity Card – Fully Expanded



1101 Laptop 1 PPS WAREHOUSE

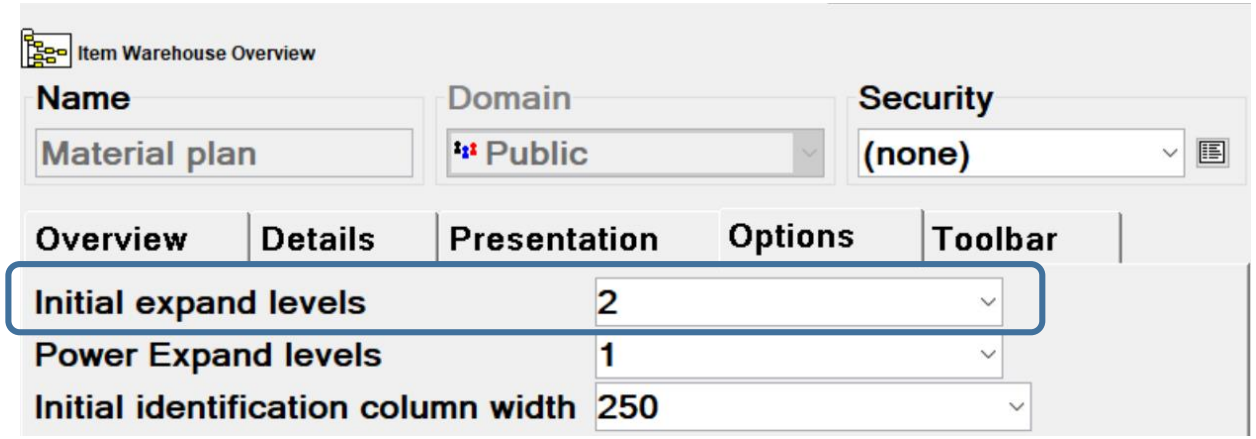
General | Stock Status | Planning Options | Material Logistics | Materials Planning | Planned Activity

Details: Planned activity

Identification	Due date	Req. qty.	Order qty.	Net change	Projected ...	Exception	Start date	Order	Reference	Demand item
Activity summary	01/13/2020	20.000		-20.000	9,868.000					
Held requirement		10.000						1.CO. 86135.100	AEROSYS, IN...	
Held requirement		10.000						1.CO. 86137.100	AEROSYS, IN...	
Activity summary	02/04/2020	5.000		-5.000	9,863.000					
Held requirement		5.000						1.CO. 86138.100	AEROSYS, IN...	
Activity summary	04/08/2020	5.000		-5.000	9,858.000					
Held requirement		5.000						1.CO. 86146.100	AIRPAC, INC.	
Activity summary	04/23/2020				9,858.000					
Safety stock requi		*1,000.000*								
Activity summary	05/01/2020	5,000.000		-5,000.000	4,858.000					
Requirement		5,000.000								
Activity summary	06/01/2020	8,000.000	5,000.000	-3,000.000	1,858.000					
Requirement		8,000.000								
Firm planned M.O.			5,000.000				05/18/2020			
Source of demar	*06/01/2020*	*4,142.000*						*Manual requirem...*		*1101*
Source of demar	*07/01/2020*	*858.000*						*Manual requirem...*		*1101*
Activity summary	07/01/2020	10,000.000	10,000.000		1,858.000					
Requirement		10,000.000								
Planned M.O. recc			10,000.000				06/17/2020			
Source of demar	*07/01/2020*	*9,142.000*						*Manual requirem...*		*1101*
Source of demar	*08/01/2020*	*858.000*						*Manual requirem...*		*1101*
Activity summary	07/31/2020		10,000.000	10,000.000	11,858.000					
Planned M.O.			10,000.000				07/17/2020			
Source of demar	*08/01/2020*	*9,142.000*						*Manual requirem...*		*1101*
Source of demar	*09/01/2020*	*858.000*						*Manual requirem...*		*1101*
Activity summary	08/01/2020	10,000.000		-10,000.000	1,858.000					
Requirement		10,000.000								
Activity summary	09/01/2020	10,000.000	10,000.000		1,858.000					
Requirement		10,000.000								
Planned M.O.			10,000.000				08/18/2020			
Source of demar	*09/01/2020*	*9,142.000*						*Manual requirem...*		*1101*
Source of demar	*10/01/2020*	*858.000*						*Manual requirem...*		*1101*
Activity summary	10/01/2020	7,500.000	7,000.000	-500.000	1,358.000					
Requirement		7,500.000								
Planned M.O.			7,000.000				09/17/2020			
Source of demar	*10/01/2020*	*6,642.000*						*Manual requirem...*		*1101*
Source of demar	*11/01/2020*	*358.000*						*Manual requirem...*		*1101*
Activity summary	10/30/2020		9,000.000	9,000.000	10,358.000					
Planned M.O.			9,000.000				10/16/2020			
Source of demar	*11/01/2020*	*8,642.000*						*Manual requirem...*		*1101*
Source of demar	*12/01/2020*	*358.000*						*Manual requirem...*		*1101*

Change Number of Levels Expanded

- To change the amount of detail shown on the card:
  - Click on ‘Customize’ the ‘Cards’
  - Select the Planned Activity Card then the Change button
  - The Overview card will be displayed, click on the Change button to the right of ‘Overview Material Plan’
  - Click on the ‘Options’ tab
    - Set ‘Initial Expand’ to 2 to see the requirements in detail
    - Source of Demand will only show if you click on the + to the left of the Order/Planned Order



Planned Activity – 2 Levels Open

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General | Stock Status | Planning Options | Material Logistics | Materials Planning | Planned Activity

Details: Planned activity

Identification	Due date	Req. qty.	Order qty.	Net change	Projected ...	Exception	Start date	Order	Reference
Activity summary	01/13/2020	20.000		-20.000	9,868.000				
Held requirement		10.000						1.CO. 86135.100	AEROSYS, IN...
Held requirement		10.000						1.CO. 86137.100	AEROSYS, IN...
Activity summary	02/04/2020	5.000		-5.000	9,863.000				
Held requirement		5.000						1.CO. 86138.100	AEROSYS, IN...
Activity summary	04/08/2020	5.000		-5.000	9,858.000				
Held requirement		5.000						1.CO. 86146.100	AIRPAC, INC.
Activity summary	04/23/2020				9,858.000				
Safety stock requirem		*1,000.000*							
Activity summary	05/01/2020	5,000.000		-5,000.000	4,858.000				
Requirement		5,000.000							
Activity summary	06/01/2020	8,000.000	5,000.000	-3,000.000	1,858.000				
Requirement		8,000.000							
Firm planned M.O. rec			5,000.000				05/18/2020		
Activity summary	07/01/2020	10,000.000	10,000.000		1,858.000				
Requirement		10,000.000							
Planned M.O. recomm			10,000.000				06/17/2020		
Activity summary	07/31/2020		10,000.000	10,000.000	11,858.000				
Planned M.O.			10,000.000				07/17/2020		
Activity summary	08/01/2020	10,000.000		-10,000.000	1,858.000				
Requirement		10,000.000							
Activity summary	09/01/2020	10,000.000	10,000.000		1,858.000				
Requirement		10,000.000							
Planned M.O.			10,000.000				08/18/2020		
Activity summary	10/01/2020	7,500.000	7,000.000	-500.000	1,358.000				
Requirement		7,500.000							
Planned M.O.			7,000.000				09/17/2020		
Activity summary	10/30/2020		9,000.000	9,000.000	10,358.000				
Planned M.O.			9,000.000				10/16/2020		
Activity summary	11/01/2020	9,000.000		-9,000.000	1,358.000				
Requirement		9,000.000							
Activity summary	12/01/2020	15,000.000	15,000.000		1,358.000				
Requirement		15,000.000							
Planned M.O.			15,000.000				11/17/2020		

Releasing/Updating Orders from Planned Activity

- You can select an order by single clicking on it from the Planned Activity Card then a right click to bring up the ‘Maintain’ Menu
- This is not an option in ‘Item Requirements Inquiry’ which, in my opinion, makes this a much more powerful tool
- Maintenance options to
  - Create an order from a planned order
  - Firm plan an order
  - Accept an expedite or defer message and update the MO/PO/Schedule with the new date
  - Check Component Availability for M-Plan orders

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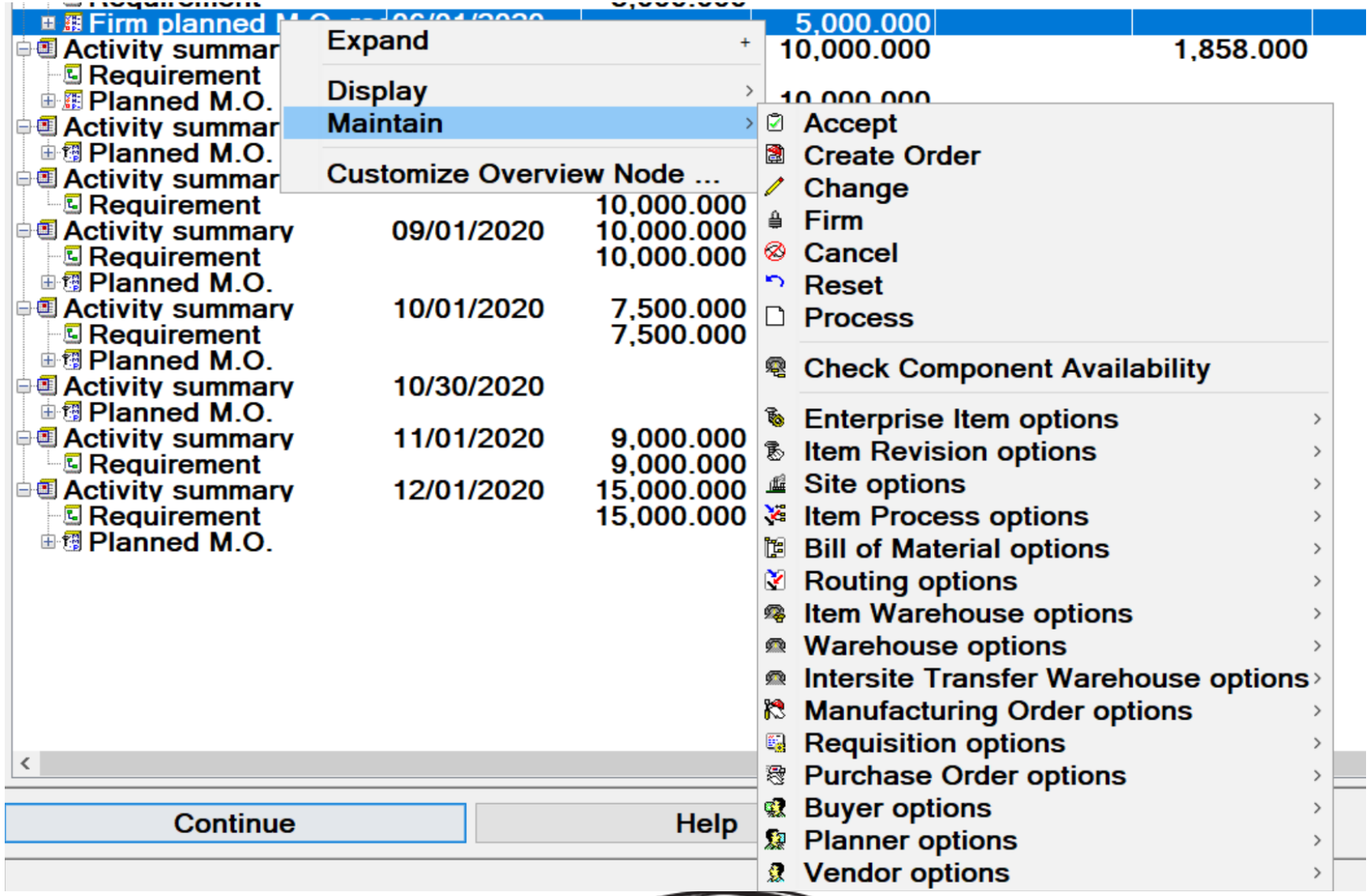
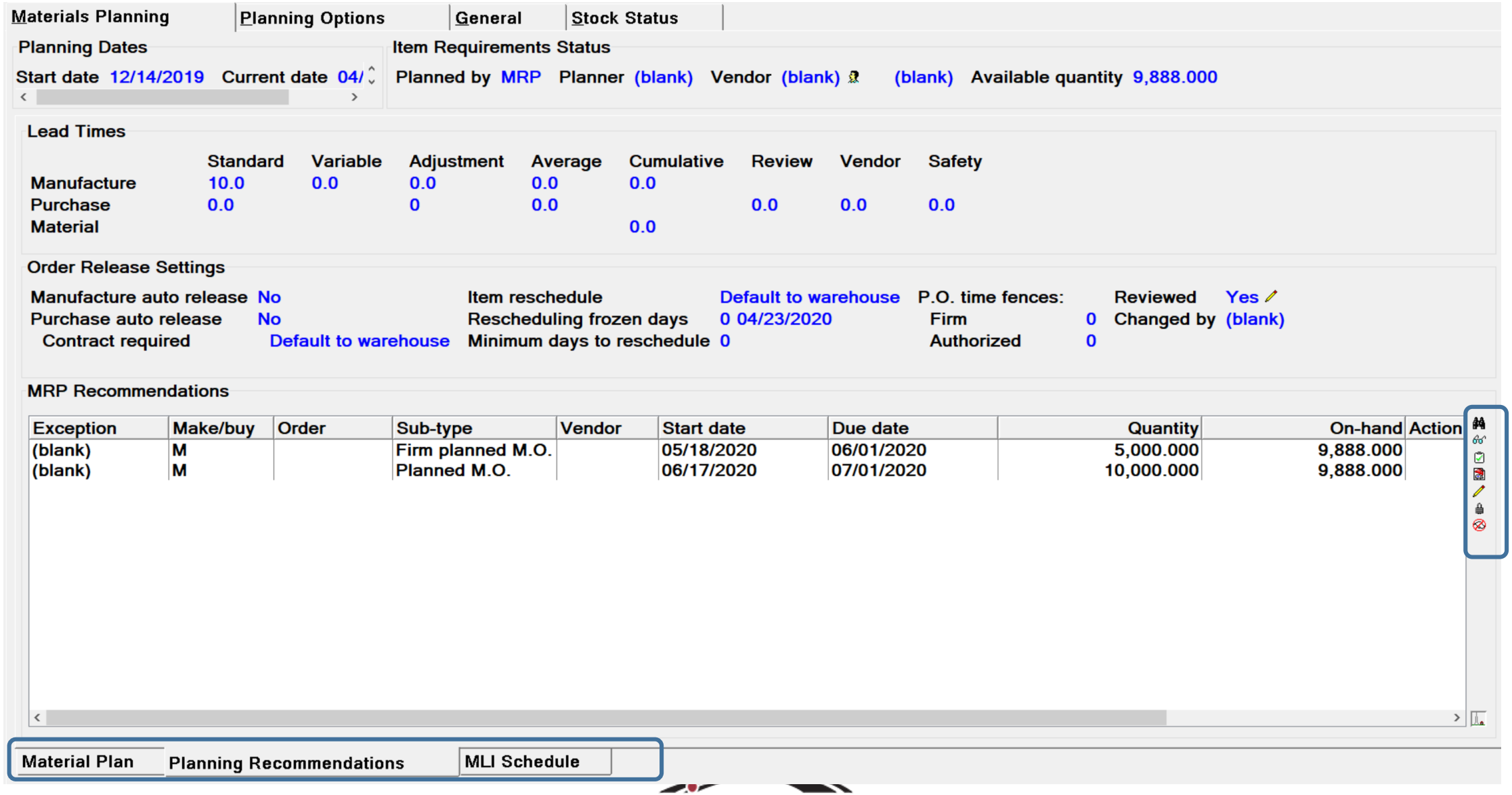
Releasing/Updating Orders from Planned Activity



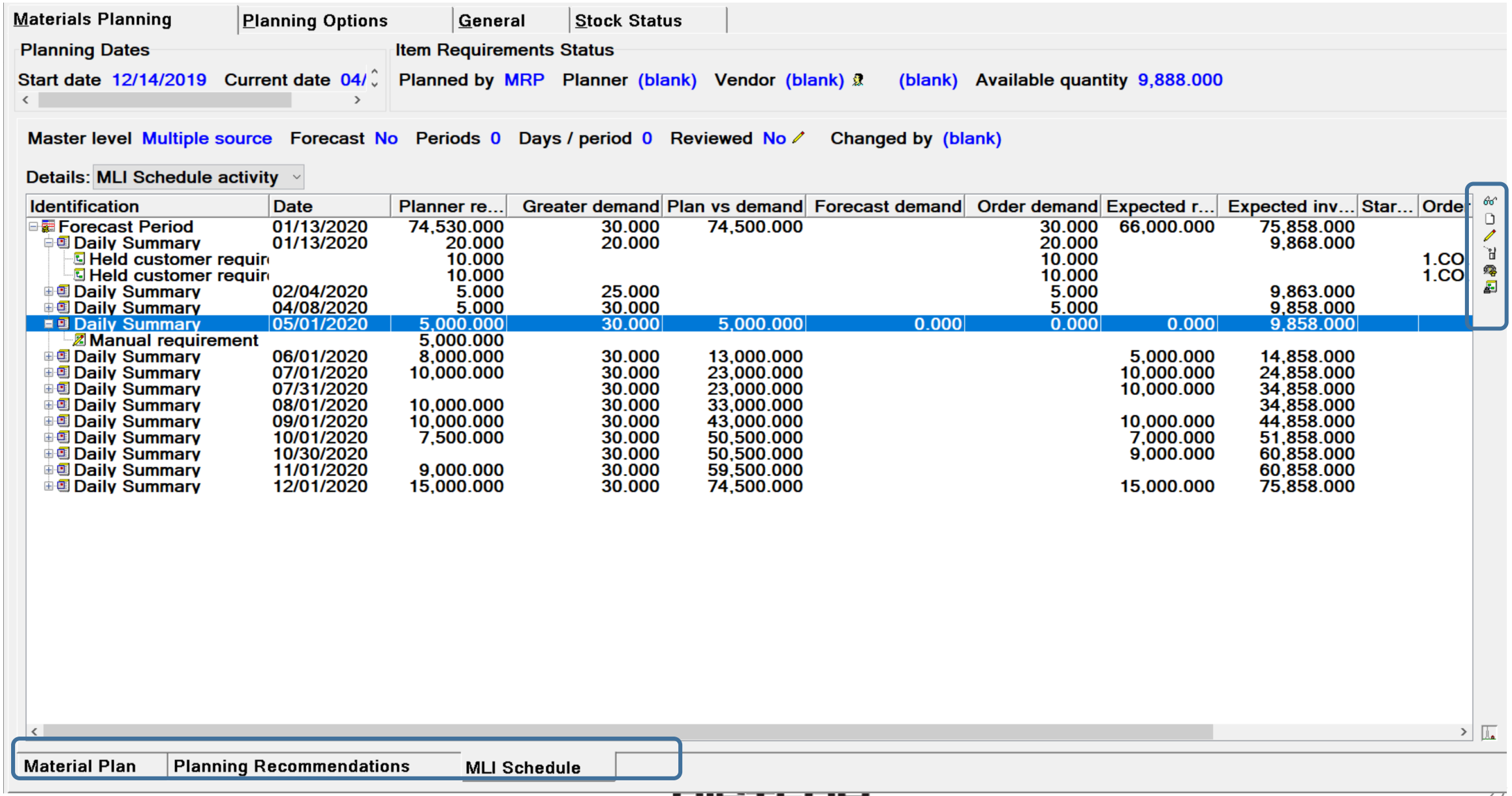
Other Cards

- Infor created a new card file called ‘Planning’ which contains other new cards:
  - Material Plan – holds the Planned Activity card
  - Planning Recommendations – holds the MRP recommendations for the item along with informational fields
  - MLI Schedule – equivalent of the ‘MLI vs. Forecast/Orders’ screen in green screen

Planning Recommendations



MLI Schedule



Identification	Date	Planner re...	Greater demand	Plan vs demand	Forecast demand	Order demand	Expected r...	Expected inv...	Star...	Orde
Forecast Period	01/13/2020	74,530.000	30.000	74,500.000		30.000	66,000.000	75,858.000		
Daily Summary	01/13/2020	20.000	20.000			20.000		9,868.000		
Held customer requir		10.000				10.000				1.CO
Held customer requir		10.000				10.000				1.CO
Daily Summary	02/04/2020	5.000	25.000			5.000		9,863.000		
Daily Summary	04/08/2020	5.000	30.000			5.000		9,858.000		
Daily Summary	05/01/2020	5,000.000	30.000	5,000.000	0.000	0.000	0.000	9,858.000		
Manual requirement		5,000.000								
Daily Summary	06/01/2020	8,000.000	30.000	13,000.000			5,000.000	14,858.000		
Daily Summary	07/01/2020	10,000.000	30.000	23,000.000			10,000.000	24,858.000		
Daily Summary	07/31/2020		30.000	23,000.000			10,000.000	34,858.000		
Daily Summary	08/01/2020	10,000.000	30.000	33,000.000				34,858.000		
Daily Summary	09/01/2020	10,000.000	30.000	43,000.000			10,000.000	44,858.000		
Daily Summary	10/01/2020	7,500.000	30.000	50,500.000			7,000.000	51,858.000		
Daily Summary	10/30/2020		30.000	50,500.000			9,000.000	60,858.000		
Daily Summary	11/01/2020	9,000.000	30.000	59,500.000				60,858.000		
Daily Summary	12/01/2020	15,000.000	30.000	74,500.000			15,000.000	75,858.000		

Creating Orders in PowerLink

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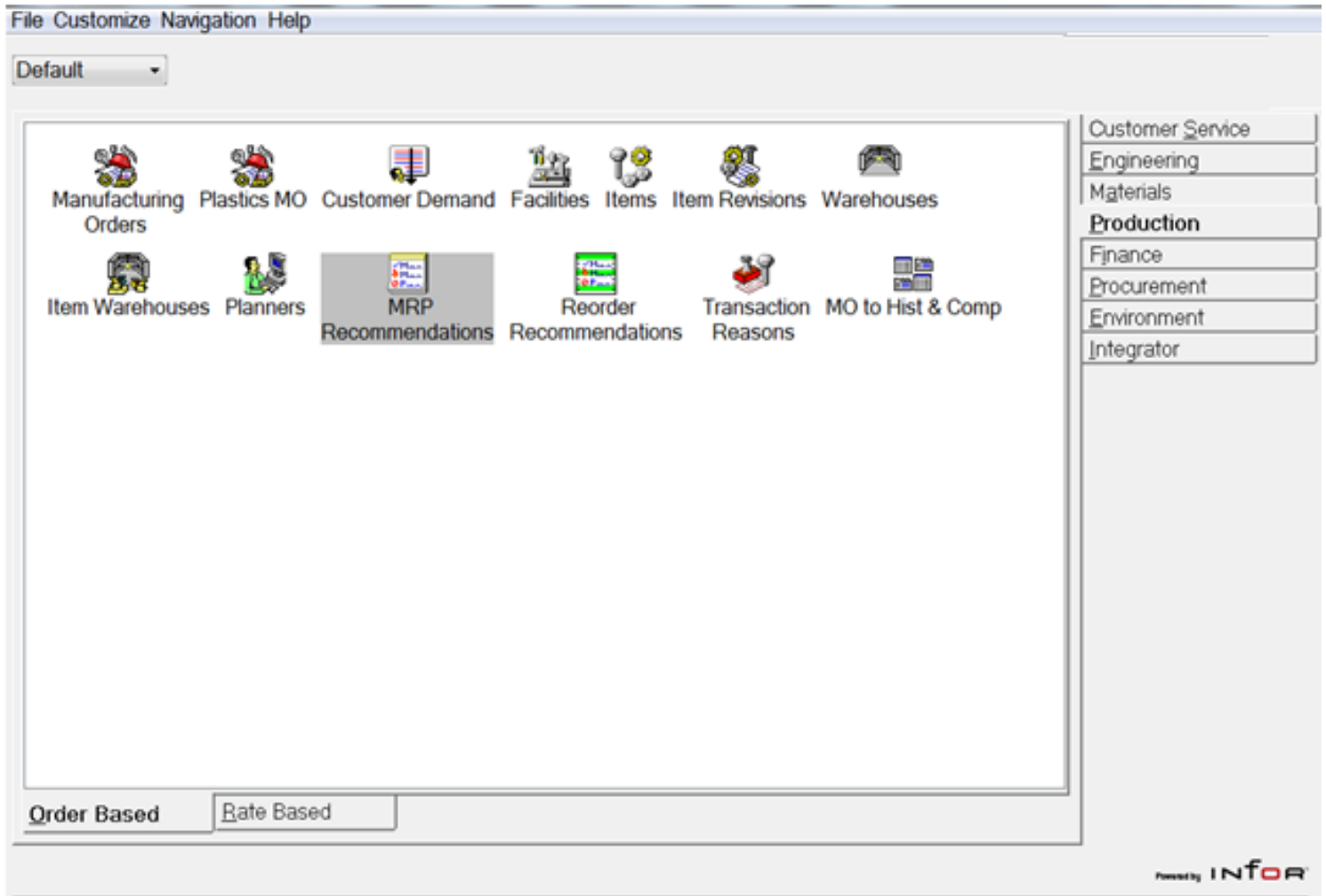
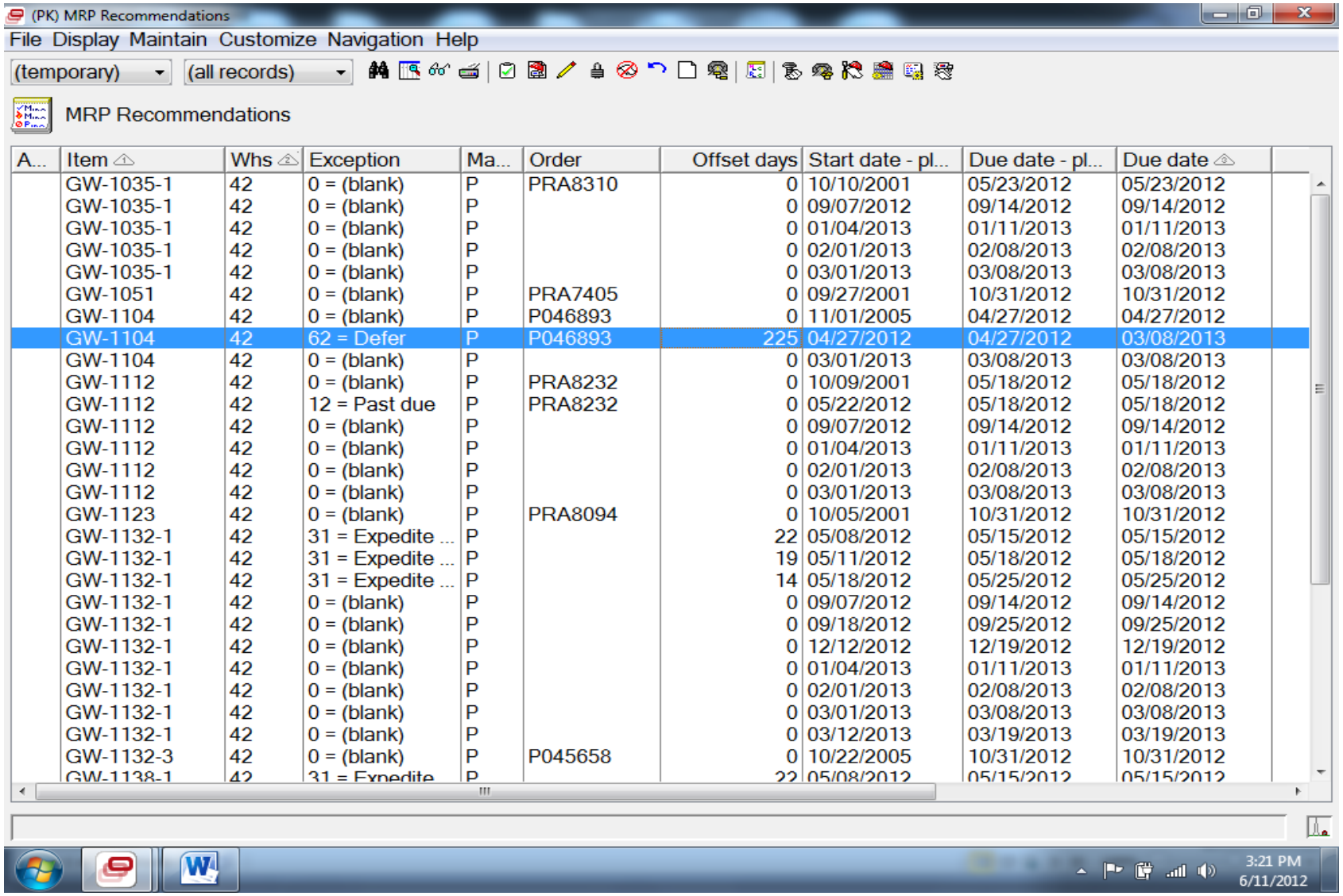
THE INFOR XA EXPERTS

- From the ‘Production’ tab, select the ‘MRP Recommendations’ object to view MRP Planned orders and existing MO’s, PO’s, ISL and/or Schedules
- Planned orders can come from MRP, VPI or Thru Put



MRP Recommendations



A...	Item	Whs	Exception	Ma...	Order	Offset days	Start date - pl...	Due date - pl...	Due date
	GW-1035-1	42	0 = (blank)	P	PRA8310	0	10/10/2001	05/23/2012	05/23/2012
	GW-1035-1	42	0 = (blank)	P		0	09/07/2012	09/14/2012	09/14/2012
	GW-1035-1	42	0 = (blank)	P		0	01/04/2013	01/11/2013	01/11/2013
	GW-1035-1	42	0 = (blank)	P		0	02/01/2013	02/08/2013	02/08/2013
	GW-1035-1	42	0 = (blank)	P		0	03/01/2013	03/08/2013	03/08/2013
	GW-1051	42	0 = (blank)	P	PRA7405	0	09/27/2001	10/31/2012	10/31/2012
	GW-1104	42	0 = (blank)	P	P046893	0	11/01/2005	04/27/2012	04/27/2012
	GW-1104	42	62 = Defer	P	P046893	225	04/27/2012	04/27/2012	03/08/2013
	GW-1104	42	0 = (blank)	P		0	03/01/2013	03/08/2013	03/08/2013
	GW-1112	42	0 = (blank)	P	PRA8232	0	10/09/2001	05/18/2012	05/18/2012
	GW-1112	42	12 = Past due	P	PRA8232	0	05/22/2012	05/18/2012	05/18/2012
	GW-1112	42	0 = (blank)	P		0	09/07/2012	09/14/2012	09/14/2012
	GW-1112	42	0 = (blank)	P		0	01/04/2013	01/11/2013	01/11/2013
	GW-1112	42	0 = (blank)	P		0	02/01/2013	02/08/2013	02/08/2013
	GW-1112	42	0 = (blank)	P		0	03/01/2013	03/08/2013	03/08/2013
	GW-1123	42	0 = (blank)	P	PRA8094	0	10/05/2001	10/31/2012	10/31/2012
	GW-1132-1	42	31 = Expedite ...	P		22	05/08/2012	05/15/2012	05/15/2012
	GW-1132-1	42	31 = Expedite ...	P		19	05/11/2012	05/18/2012	05/18/2012
	GW-1132-1	42	31 = Expedite ...	P		14	05/18/2012	05/25/2012	05/25/2012
	GW-1132-1	42	0 = (blank)	P		0	09/07/2012	09/14/2012	09/14/2012
	GW-1132-1	42	0 = (blank)	P		0	09/18/2012	09/25/2012	09/25/2012
	GW-1132-1	42	0 = (blank)	P		0	12/12/2012	12/19/2012	12/19/2012
	GW-1132-1	42	0 = (blank)	P		0	01/04/2013	01/11/2013	01/11/2013
	GW-1132-1	42	0 = (blank)	P		0	02/01/2013	02/08/2013	02/08/2013
	GW-1132-1	42	0 = (blank)	P		0	03/01/2013	03/08/2013	03/08/2013
	GW-1132-1	42	0 = (blank)	P		0	03/12/2013	03/19/2013	03/19/2013
	GW-1132-3	42	0 = (blank)	P	P045658	0	10/22/2005	10/31/2012	10/31/2012
	GW-1138-1	42	31 = Expedite	P		22	05/08/2012	05/15/2012	05/15/2012

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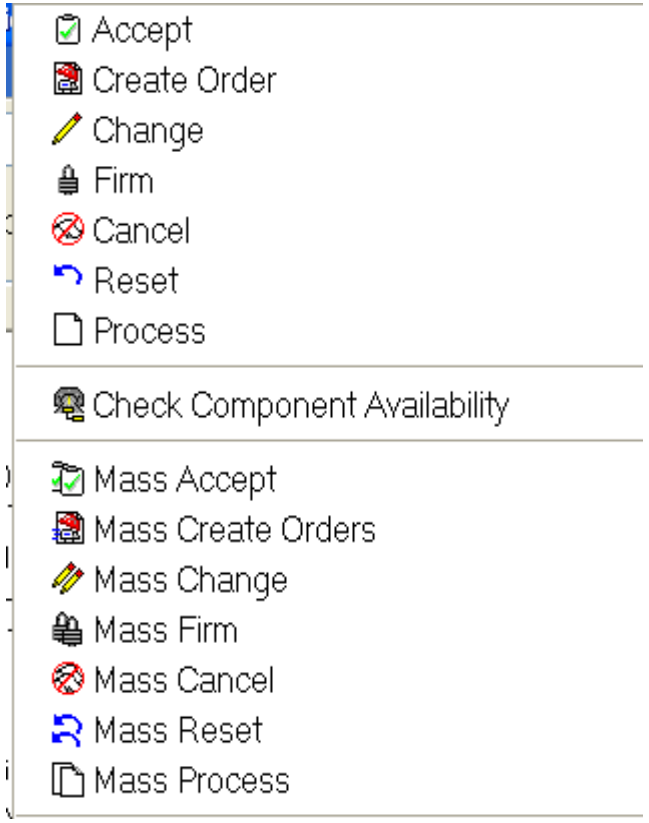
THE INFOR XA EXPERTS

Tool Bar Options



- Accept – for Expedite & Defer, accept recommended date
- Create Order – for 31, 51 and 0, create order
- Change an existing order
- Change a planned order to a firm planned order
- Cancel an order – 72
- Reset (reverse a previous action; not using immediate processing)
- Process – If ‘Immediate Processing’ is not selected in preferences, you must run ‘Process’ to have your actions executed
- Check Component Availability – for make items, check the component quantity required vs on hand to determine if there is enough inventory to manufacture the item

CISTECH
THE INFOR XA EXPERTS

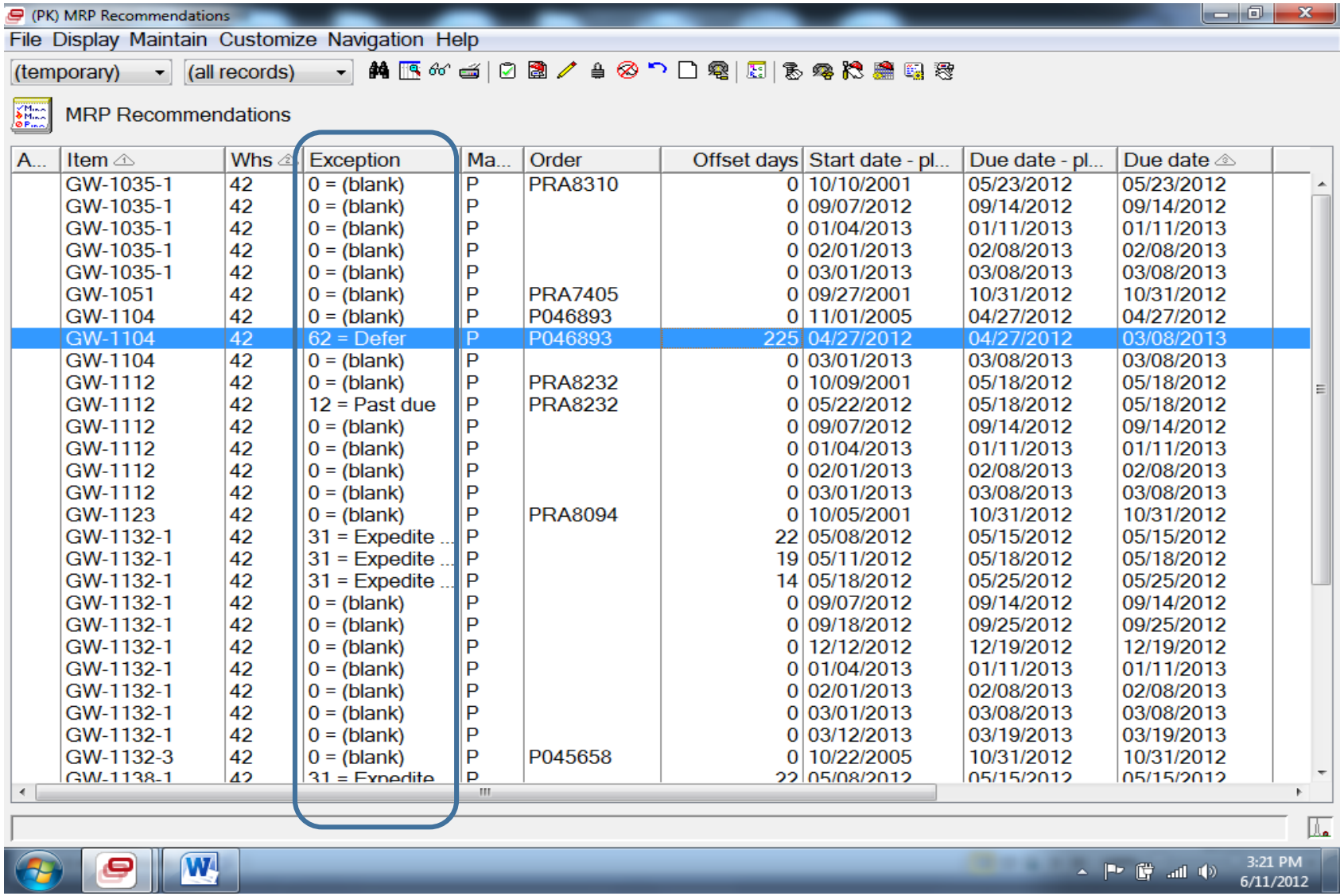
Exceptions

- *0 Blank* – MRP planned order with no recommendation but within the Review Horizon
- *11-24 Past Due* – due date is earlier than MRP Current date
- *31 Expedite & Release* – MRP planned order where order start date is earlier than MRP current date
- *33 Expedite Existing Order* – bring in order earlier than Due Date; total time is less than lead time
- *42 Reschedule Existing Order*- bring in order earlier than Due date; total time is within lead time

Recommendations

- *51 Release* – order start date is within the ‘Release’ date as defined in MRP horizons
- *62 Defer* – push the order due date out
- *72 Cancel* – cancel the order since the total requirements are less than order quantity
- Field to add when creating the view is ‘Exception Status’
  - Can specify to display:
    - Value – number
    - Alias – description
    - Both value and alias

MRP Recommendations



A...	Item	Whs	Exception	Ma...	Order	Offset days	Start date - pl...	Due date - pl...	Due date
	GW-1035-1	42	0 = (blank)	P	PRA8310	0	10/10/2001	05/23/2012	05/23/2012
	GW-1035-1	42	0 = (blank)	P		0	09/07/2012	09/14/2012	09/14/2012
	GW-1035-1	42	0 = (blank)	P		0	01/04/2013	01/11/2013	01/11/2013
	GW-1035-1	42	0 = (blank)	P		0	02/01/2013	02/08/2013	02/08/2013
	GW-1035-1	42	0 = (blank)	P		0	03/01/2013	03/08/2013	03/08/2013
	GW-1051	42	0 = (blank)	P	PRA7405	0	09/27/2001	10/31/2012	10/31/2012
	GW-1104	42	0 = (blank)	P	P046893	0	11/01/2005	04/27/2012	04/27/2012
	GW-1104	42	62 = Defer	P	P046893	225	04/27/2012	04/27/2012	03/08/2013
	GW-1104	42	0 = (blank)	P		0	03/01/2013	03/08/2013	03/08/2013
	GW-1112	42	0 = (blank)	P	PRA8232	0	10/09/2001	05/18/2012	05/18/2012
	GW-1112	42	12 = Past due	P	PRA8232	0	05/22/2012	05/18/2012	05/18/2012
	GW-1112	42	0 = (blank)	P		0	09/07/2012	09/14/2012	09/14/2012
	GW-1112	42	0 = (blank)	P		0	01/04/2013	01/11/2013	01/11/2013
	GW-1112	42	0 = (blank)	P		0	02/01/2013	02/08/2013	02/08/2013
	GW-1112	42	0 = (blank)	P		0	03/01/2013	03/08/2013	03/08/2013
	GW-1123	42	0 = (blank)	P	PRA8094	0	10/05/2001	10/31/2012	10/31/2012
	GW-1132-1	42	31 = Expedite ...	P		22	05/08/2012	05/15/2012	05/15/2012
	GW-1132-1	42	31 = Expedite ...	P		19	05/11/2012	05/18/2012	05/18/2012
	GW-1132-1	42	31 = Expedite ...	P		14	05/18/2012	05/25/2012	05/25/2012
	GW-1132-1	42	0 = (blank)	P		0	09/07/2012	09/14/2012	09/14/2012
	GW-1132-1	42	0 = (blank)	P		0	09/18/2012	09/25/2012	09/25/2012
	GW-1132-1	42	0 = (blank)	P		0	12/12/2012	12/19/2012	12/19/2012
	GW-1132-1	42	0 = (blank)	P		0	01/04/2013	01/11/2013	01/11/2013
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	GW-1132-1	42	0 = (blank)	P		0	03/12/2013	03/19/2013	03/19/2013
	GW-1132-3	42	0 = (blank)	P	P045658	0	10/22/2005	10/31/2012	10/31/2012
	GW-1138-1	42	31 = Expedite	P		22	05/08/2012	05/15/2012	05/15/2012

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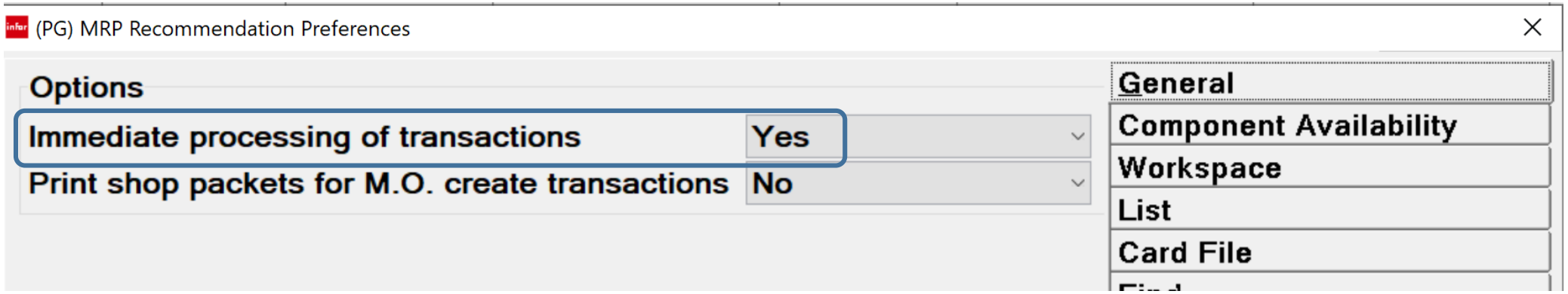
THE INFOR XA EXPERTS

MRP Recommendation Preferences

- Immediate Processing
  - Creates/changes orders when ‘Update’ is selected
  - If Immediate Processing is not selected then, after taking actions, you must run ‘Process’ to update orders
- Component Availability Check
  - Sets threshold for warning message based on the number of planned orders selected for component availability check

Preferences



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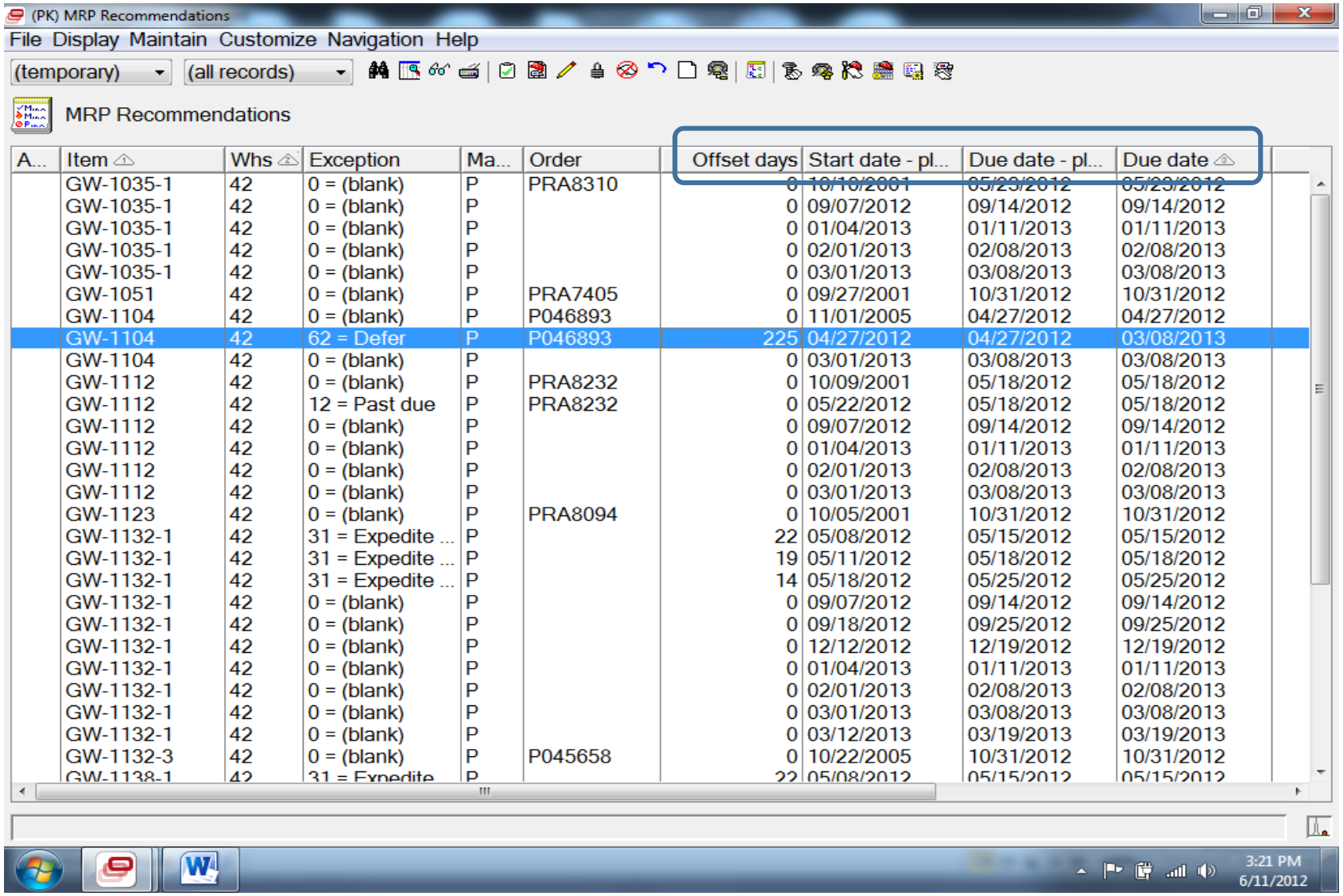
THE INFOR XA EXPERTS

Field Explanations

- Order Start/Due Date **Planned**
  - Existing start/due dates on the MO/PO/Schedule
- Order Start/Due Date **New**
  - MRP recommended date
- Offset days
  - For Expedite and Defer messages
  - Number of working days to move the order

MRP Recommendations



A...	Item	Whs	Exception	Ma...	Order	Offset days	Start date - pl...	Due date - pl...	Due date
	GW-1035-1	42	0 = (blank)	P	PRA8310	0	10/10/2001	05/23/2012	05/23/2012
	GW-1035-1	42	0 = (blank)	P		0	09/07/2012	09/14/2012	09/14/2012
	GW-1035-1	42	0 = (blank)	P		0	01/04/2013	01/11/2013	01/11/2013
	GW-1035-1	42	0 = (blank)	P		0	02/01/2013	02/08/2013	02/08/2013
	GW-1035-1	42	0 = (blank)	P		0	03/01/2013	03/08/2013	03/08/2013
	GW-1051	42	0 = (blank)	P	PRA7405	0	09/27/2001	10/31/2012	10/31/2012
	GW-1104	42	0 = (blank)	P	P046893	0	11/01/2005	04/27/2012	04/27/2012
	GW-1104	42	62 = Defer	P	P046893	225	04/27/2012	04/27/2012	03/08/2013
	GW-1104	42	0 = (blank)	P		0	03/01/2013	03/08/2013	03/08/2013
	GW-1112	42	0 = (blank)	P	PRA8232	0	10/09/2001	05/18/2012	05/18/2012
	GW-1112	42	12 = Past due	P	PRA8232	0	05/22/2012	05/18/2012	05/18/2012
	GW-1112	42	0 = (blank)	P		0	09/07/2012	09/14/2012	09/14/2012
	GW-1112	42	0 = (blank)	P		0	01/04/2013	01/11/2013	01/11/2013
	GW-1112	42	0 = (blank)	P		0	02/01/2013	02/08/2013	02/08/2013
	GW-1112	42	0 = (blank)	P		0	03/01/2013	03/08/2013	03/08/2013
	GW-1123	42	0 = (blank)	P	PRA8094	0	10/05/2001	10/31/2012	10/31/2012
	GW-1132-1	42	31 = Expedite ...	P		22	05/08/2012	05/15/2012	05/15/2012
	GW-1132-1	42	31 = Expedite ...	P		19	05/11/2012	05/18/2012	05/18/2012
	GW-1132-1	42	31 = Expedite ...	P		14	05/18/2012	05/25/2012	05/25/2012
	GW-1132-1	42	0 = (blank)	P		0	09/07/2012	09/14/2012	09/14/2012
	GW-1132-1	42	0 = (blank)	P		0	09/18/2012	09/25/2012	09/25/2012
	GW-1132-1	42	0 = (blank)	P		0	12/12/2012	12/19/2012	12/19/2012
	GW-1132-1	42	0 = (blank)	P		0	01/04/2013	01/11/2013	01/11/2013
	GW-1132-1	42	0 = (blank)	P		0	02/01/2013	02/08/2013	02/08/2013
	GW-1132-1	42	0 = (blank)	P		0	03/01/2013	03/08/2013	03/08/2013
	GW-1132-1	42	0 = (blank)	P		0	03/12/2013	03/19/2013	03/19/2013
	GW-1132-3	42	0 = (blank)	P	P045658	0	10/22/2005	10/31/2012	10/31/2012
	GW-1138-1	42	31 = Expedite	P		22	05/08/2012	05/15/2012	05/15/2012

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THE INFOR XA EXPERTS

Suggested Subsets

- Planner Number
- Exception Code
  - Separate subset for each exception condition:
    - Past Due (Date Lo)
    - 31 Expedite & Release with 51 Release
    - 33 Expedite & 42 Reschedule
    - 62 Defer
    - 72 Cancel
- Offset Days
  - Use to filter messages with a low number of days in subsets with expedite/defer messages

Shortage Checking

Component Shortage Checking

- Hold down the ‘Control’ key (on your keyboard) and click on the orders you want to select for shortage checking
- After all orders have been selected, right click then select ‘Maintain’ then ‘Component Availability Check’
- A window will be displayed asking if you want to create a temporary file, click ‘yes’

Component Shortage Checking

(PI) MRP Recommendations

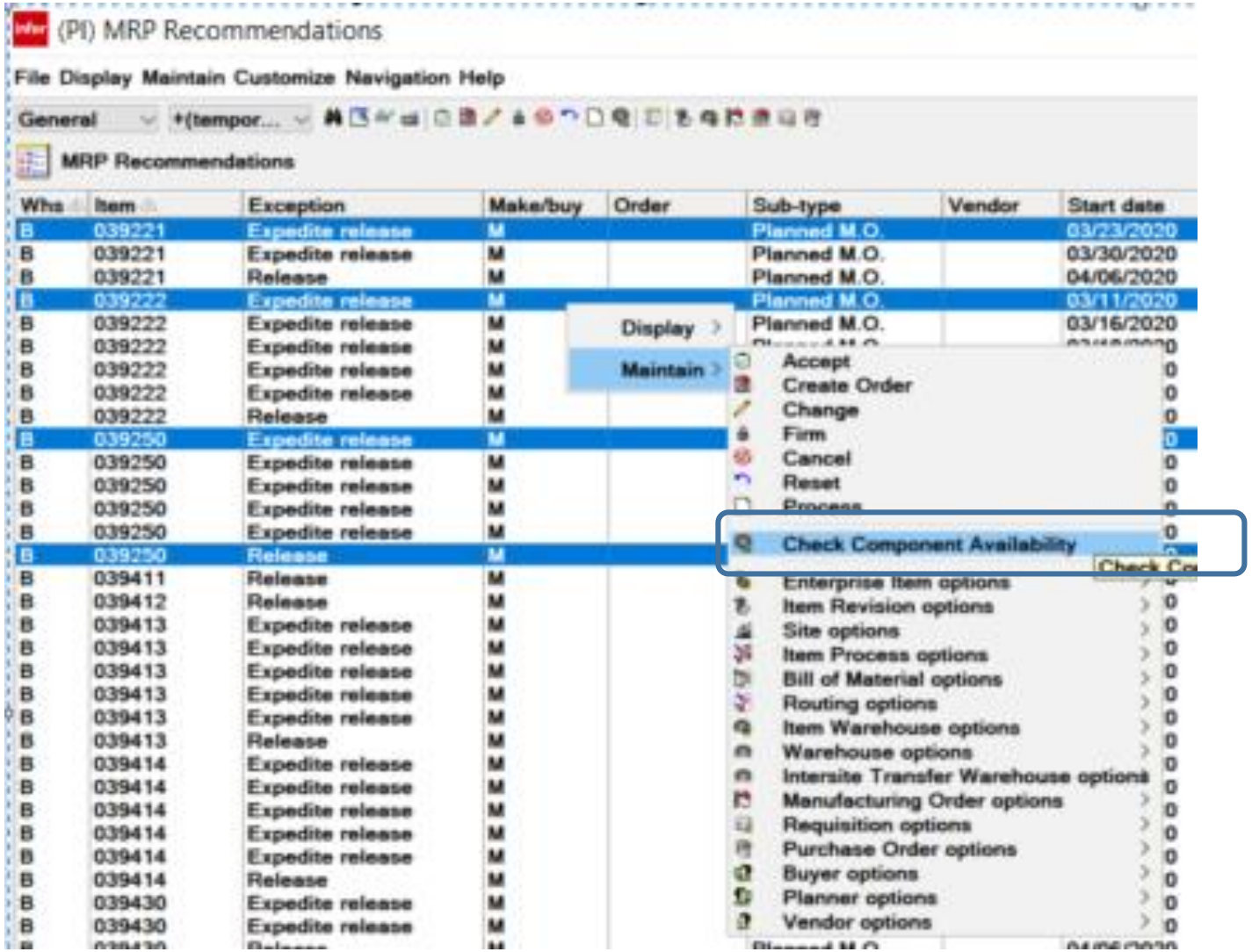
File Display Maintain Customize Navigation Help

General +(tempor...

MRP Recommendations

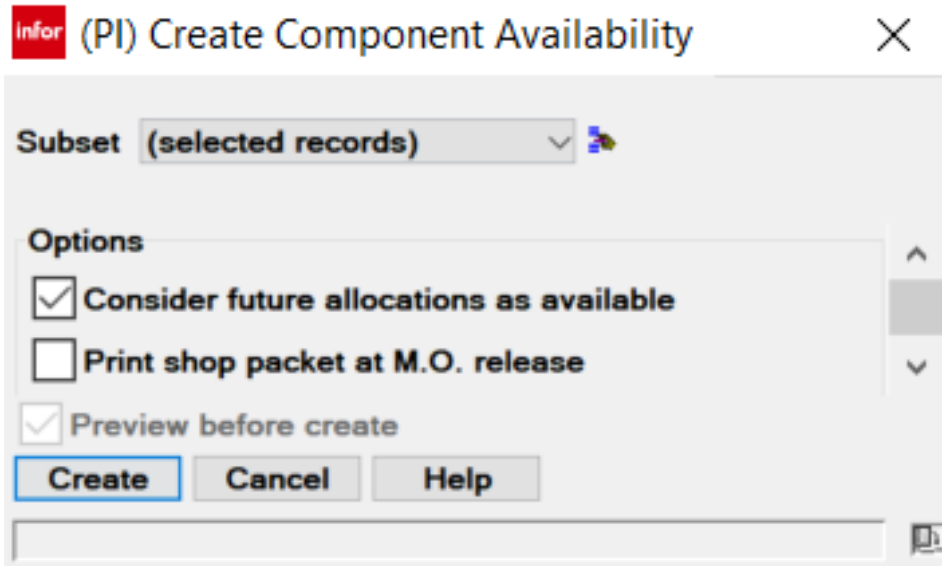
Whs	Item	Exception	Make/buy	Order	Sub-type	Vendor	Start date	Due date	Quantity
B	039221	Expedite release	M		Planned M.O.		03/23/2020	03/30/2020	65.000
B	039221	Expedite release	M		Planned M.O.		03/30/2020	04/06/2020	70.000
B	039221	Release	M		Planned M.O.		04/06/2020	04/13/2020	75.000
B	039222	Expedite release	M		Planned M.O.		03/11/2020	03/18/2020	31.000
B	039222	Expedite release	M		Planned M.O.		03/16/2020	03/23/2020	70.000
B	039222	Expedite release	M		Planned M.O.		03/18/2020	03/25/2020	12.000
B	039222	Expedite release	M		Planned M.O.		03/23/2020	03/30/2020	97.000
B	039222	Expedite release	M		Planned M.O.		03/30/2020	04/06/2020	90.000
B	039222	Release	M		Planned M.O.		04/06/2020	04/13/2020	97.000
B	039250	Expedite release	M		Planned M.O.		03/11/2020	03/18/2020	54.000
B	039250	Expedite release	M		Planned M.O.		03/16/2020	03/23/2020	20.000
B	039250	Expedite release	M		Planned M.O.		03/18/2020	03/25/2020	6.000
B	039250	Expedite release	M		Planned M.O.		03/23/2020	03/30/2020	32.000
B	039250	Expedite release	M		Planned M.O.		03/30/2020	04/06/2020	30.000
B	039250	Release	M		Planned M.O.		04/06/2020	04/13/2020	72.000
B	039411	Release	M		Planned M.O.		04/06/2020	04/13/2020	66.000
B	039412	Release	M		Planned M.O.		04/06/2020	04/13/2020	19.000
B	039413	Expedite release	M		Planned M.O.		03/11/2020	03/18/2020	14.000
B	039413	Expedite release	M		Planned M.O.		03/16/2020	03/23/2020	20.000

Component Shortage Checking



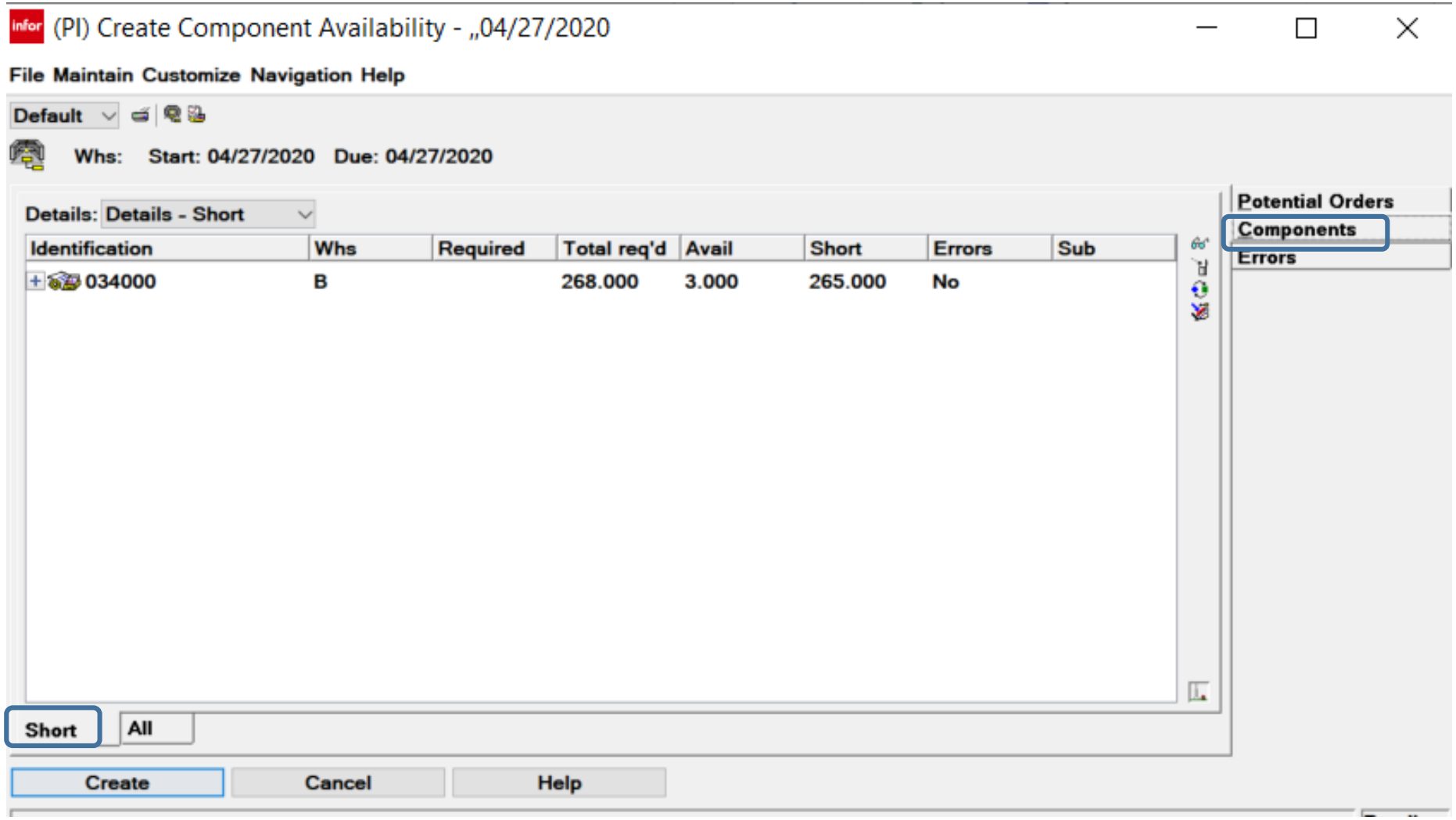
CISTECH
THE INFOR XA EXPERTS

Component Shortage Checking



- Clicking ‘Create’ builds the shortage check, not the order
- ‘Consider Future Allocations as Available’ means that MO Allocations with dates in the future will be ignored for the component check

Component Shortage Checking



CISTECH
THE INFOR XA EXPERTS

Component Shortage Checking

- On the ‘Component – Short’ card
  - Only components that are short will be displayed
  - Click on the plus button to the left of the item to see which MO(s) will have shortages
- On the ‘Potential Orders’ card
  - You can remove selected planned orders by clicking on the order and then click on the delete (trash can) button on the right side of the card
- If you want to create the MO’s for all Potential Orders, click on the ‘Create’ button (lower left corner)

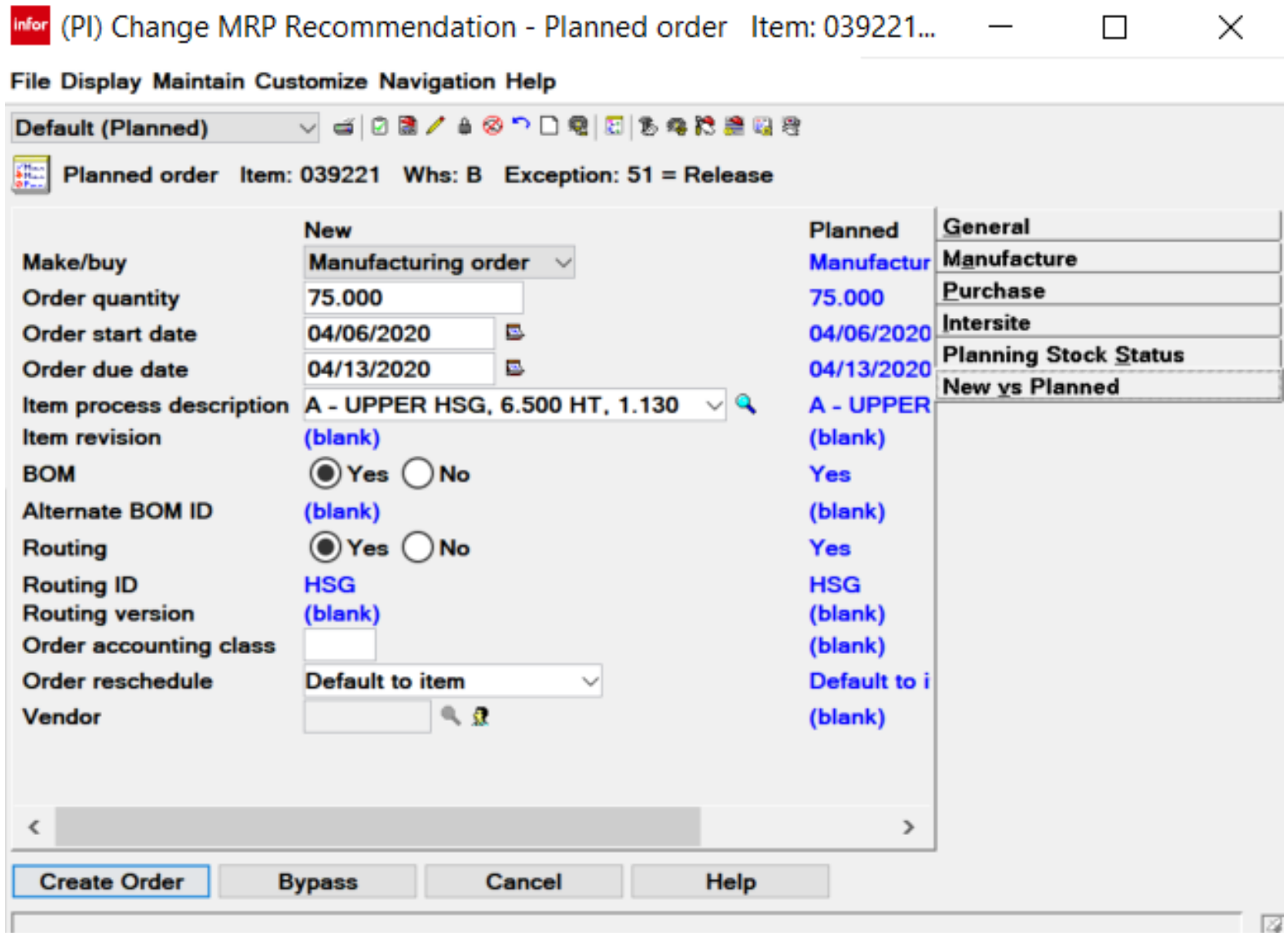
Working the Recommendations

- For ’31 Release & Expedite’, ‘51 Release’ and ‘0 Blank’ Recommendations
  - Use the ‘Create’ recommendation button to bring up a card file to create a new order
- For ‘33 Expedite’, ‘42 Reschedule’ or ’62 Defer’ Recommendations
  - Use the ‘Accept’ recommendation button to process ‘Expedite’ or ‘Defer’ messages
    - Will change the due date on PO Item/Release or MO

Create a New MO

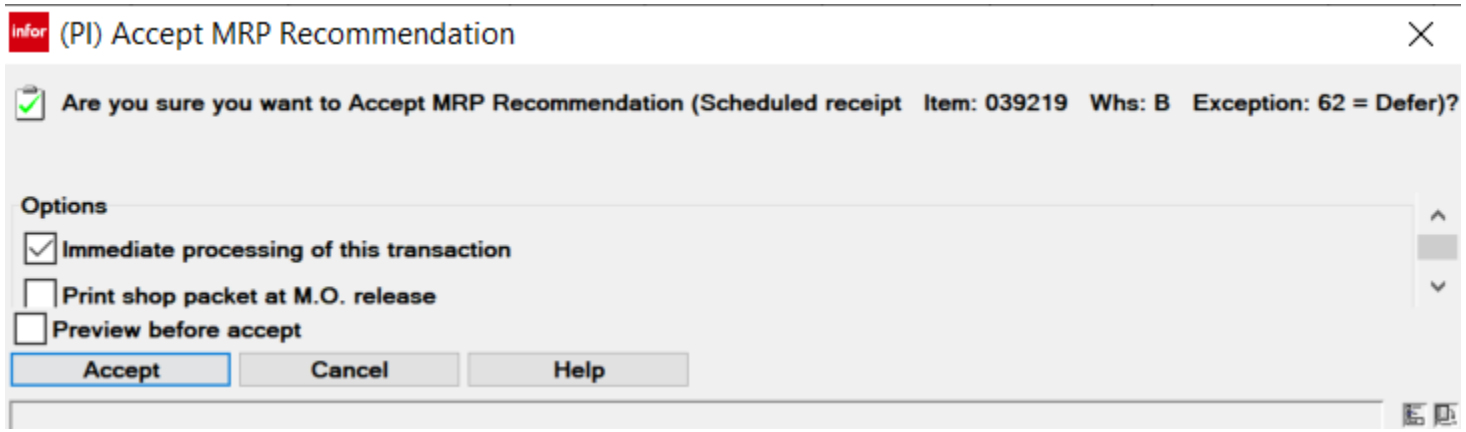
- Single click on the planned order then click on the ‘Create Order’ button
- A card file will be displayed with all the information in the planned order (dates, quantity, etc.)
- Can change any of the fields displayed
- Can select an alternate process (EPDM)
- Can copy the bill & routing to the MO or copy them in later

Create MO



CISTECH
THE INFOR XA EXPERTS

Expedite/Defer



- Single click on the recommendation
- Click on the 'Accept Recommendation' button (clipboard with green check)
- Card above will be displayed
- Click 'Accept' and date on the order will be changed

CISTECH
THE INFOR XA EXPERTS

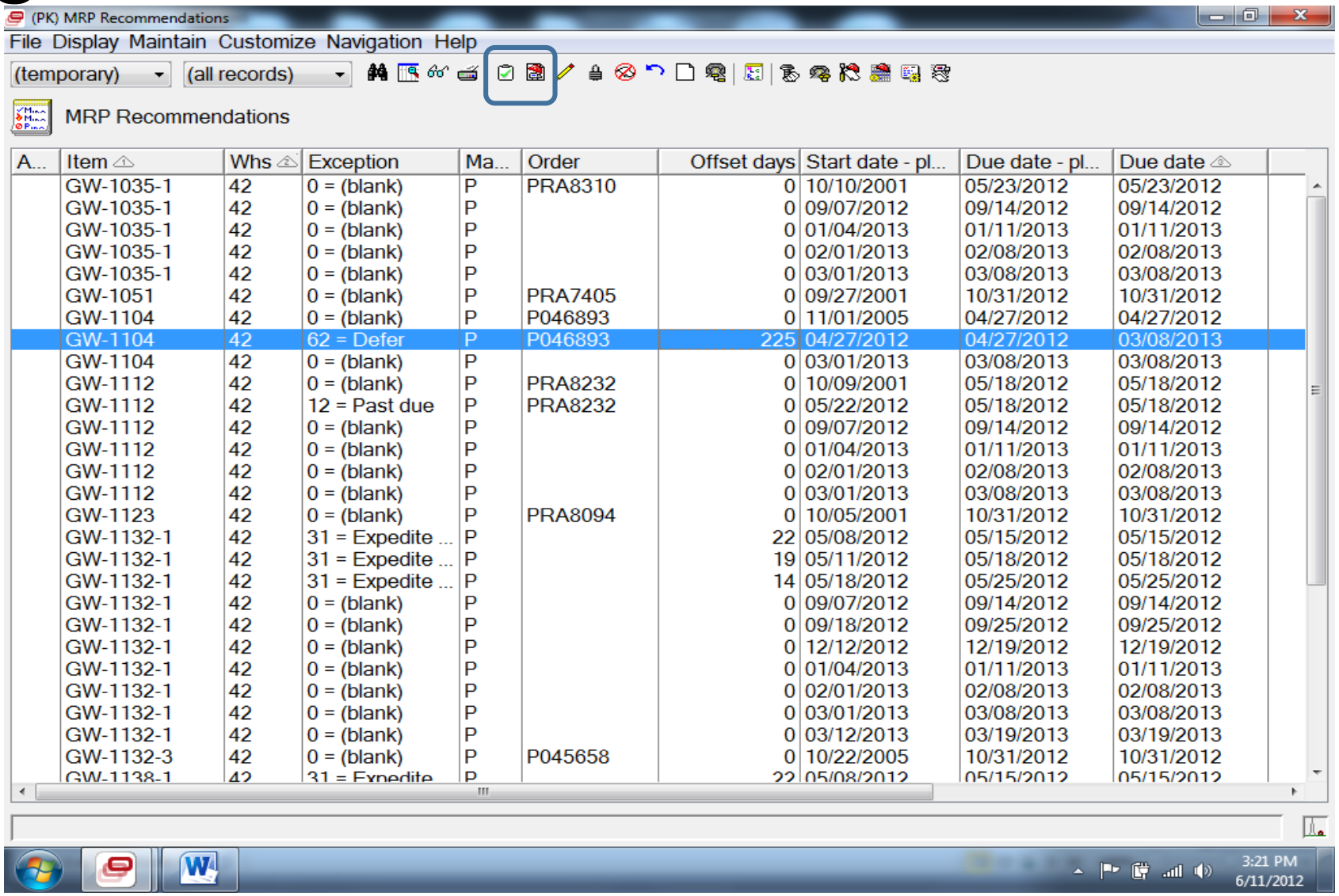
Creating Purchase Orders

CISTECH
THE INFOR XA EXPERTS

Purchase Orders

- If the recommendations are for purchased parts, you can:
  - Create a new PO
  - Add an item to an existing PO
  - Add a release to an existing blanket
  - Let the system find the existing blanket and add the release, if it doesn't find a blanket, it will create a new PO

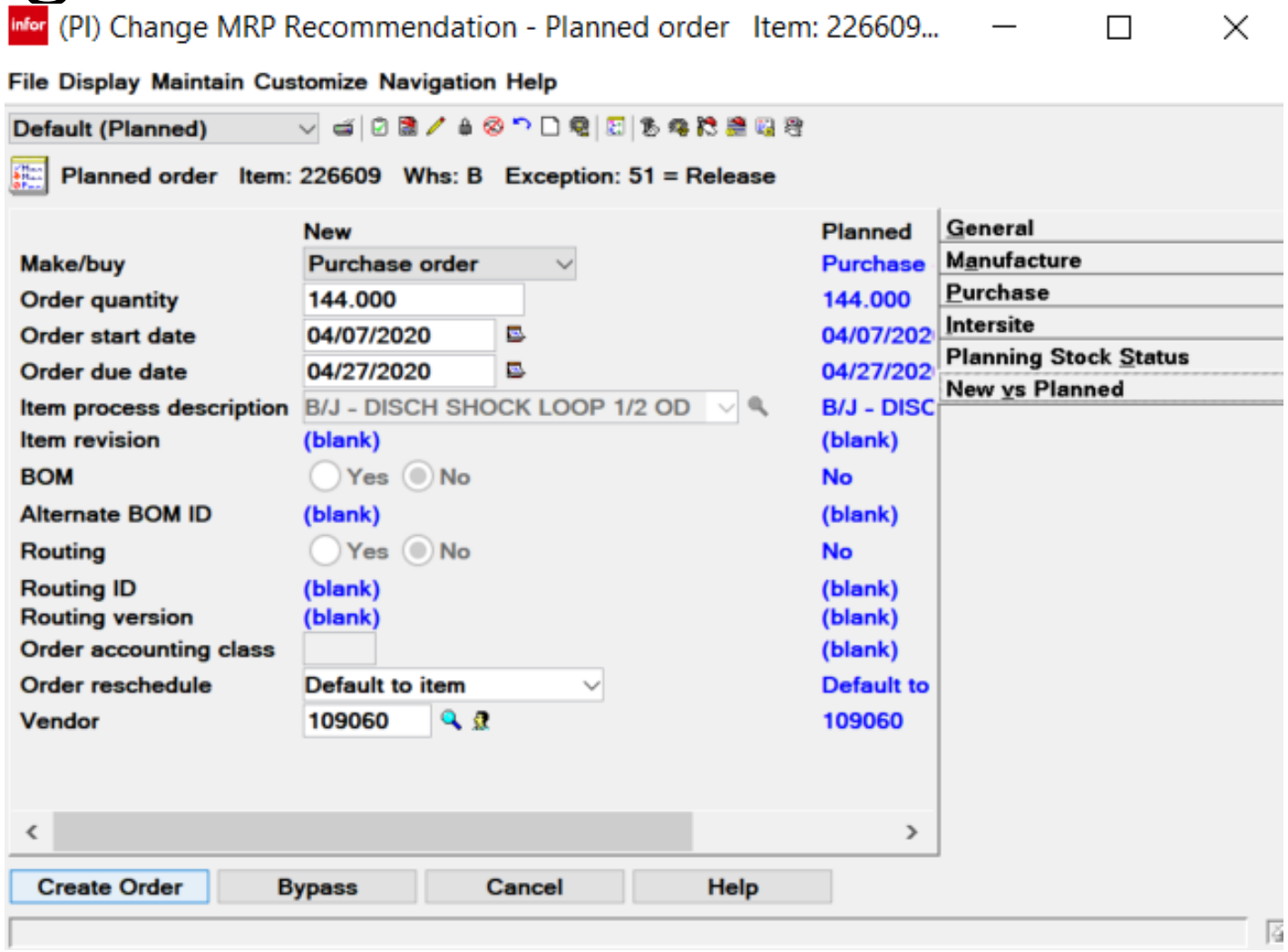
Working the Recommendations



A...	Item	Whs	Exception	Ma...	Order	Offset days	Start date - pl...	Due date - pl...	Due date
	GW-1035-1	42	0 = (blank)	P	PRA8310	0	10/10/2001	05/23/2012	05/23/2012
	GW-1035-1	42	0 = (blank)	P		0	09/07/2012	09/14/2012	09/14/2012
	GW-1035-1	42	0 = (blank)	P		0	01/04/2013	01/11/2013	01/11/2013
	GW-1035-1	42	0 = (blank)	P		0	02/01/2013	02/08/2013	02/08/2013
	GW-1035-1	42	0 = (blank)	P		0	03/01/2013	03/08/2013	03/08/2013
	GW-1051	42	0 = (blank)	P	PRA7405	0	09/27/2001	10/31/2012	10/31/2012
	GW-1104	42	0 = (blank)	P	P046893	0	11/01/2005	04/27/2012	04/27/2012
	GW-1104	42	62 = Defer	P	P046893	225	04/27/2012	04/27/2012	03/08/2013
	GW-1104	42	0 = (blank)	P		0	03/01/2013	03/08/2013	03/08/2013
	GW-1112	42	0 = (blank)	P	PRA8232	0	10/09/2001	05/18/2012	05/18/2012
	GW-1112	42	12 = Past due	P	PRA8232	0	05/22/2012	05/18/2012	05/18/2012
	GW-1112	42	0 = (blank)	P		0	09/07/2012	09/14/2012	09/14/2012
	GW-1112	42	0 = (blank)	P		0	01/04/2013	01/11/2013	01/11/2013
	GW-1112	42	0 = (blank)	P		0	02/01/2013	02/08/2013	02/08/2013
	GW-1112	42	0 = (blank)	P		0	03/01/2013	03/08/2013	03/08/2013
	GW-1123	42	0 = (blank)	P	PRA8094	0	10/05/2001	10/31/2012	10/31/2012
	GW-1132-1	42	31 = Expedite ...	P		22	05/08/2012	05/15/2012	05/15/2012
	GW-1132-1	42	31 = Expedite ...	P		19	05/11/2012	05/18/2012	05/18/2012
	GW-1132-1	42	31 = Expedite ...	P		14	05/18/2012	05/25/2012	05/25/2012
	GW-1132-1	42	0 = (blank)	P		0	09/07/2012	09/14/2012	09/14/2012
	GW-1132-1	42	0 = (blank)	P		0	09/18/2012	09/25/2012	09/25/2012
	GW-1132-1	42	0 = (blank)	P		0	12/12/2012	12/19/2012	12/19/2012
	GW-1132-1	42	0 = (blank)	P		0	01/04/2013	01/11/2013	01/11/2013
	GW-1132-1	42	0 = (blank)	P		0	02/01/2013	02/08/2013	02/08/2013
	GW-1132-1	42	0 = (blank)	P		0	03/01/2013	03/08/2013	03/08/2013
	GW-1132-1	42	0 = (blank)	P		0	03/12/2013	03/19/2013	03/19/2013
	GW-1132-3	42	0 = (blank)	P	P045658	0	10/22/2005	10/31/2012	10/31/2012
	GW-1138-1	42	31 = Expedite	P		22	05/08/2012	05/15/2012	05/15/2012

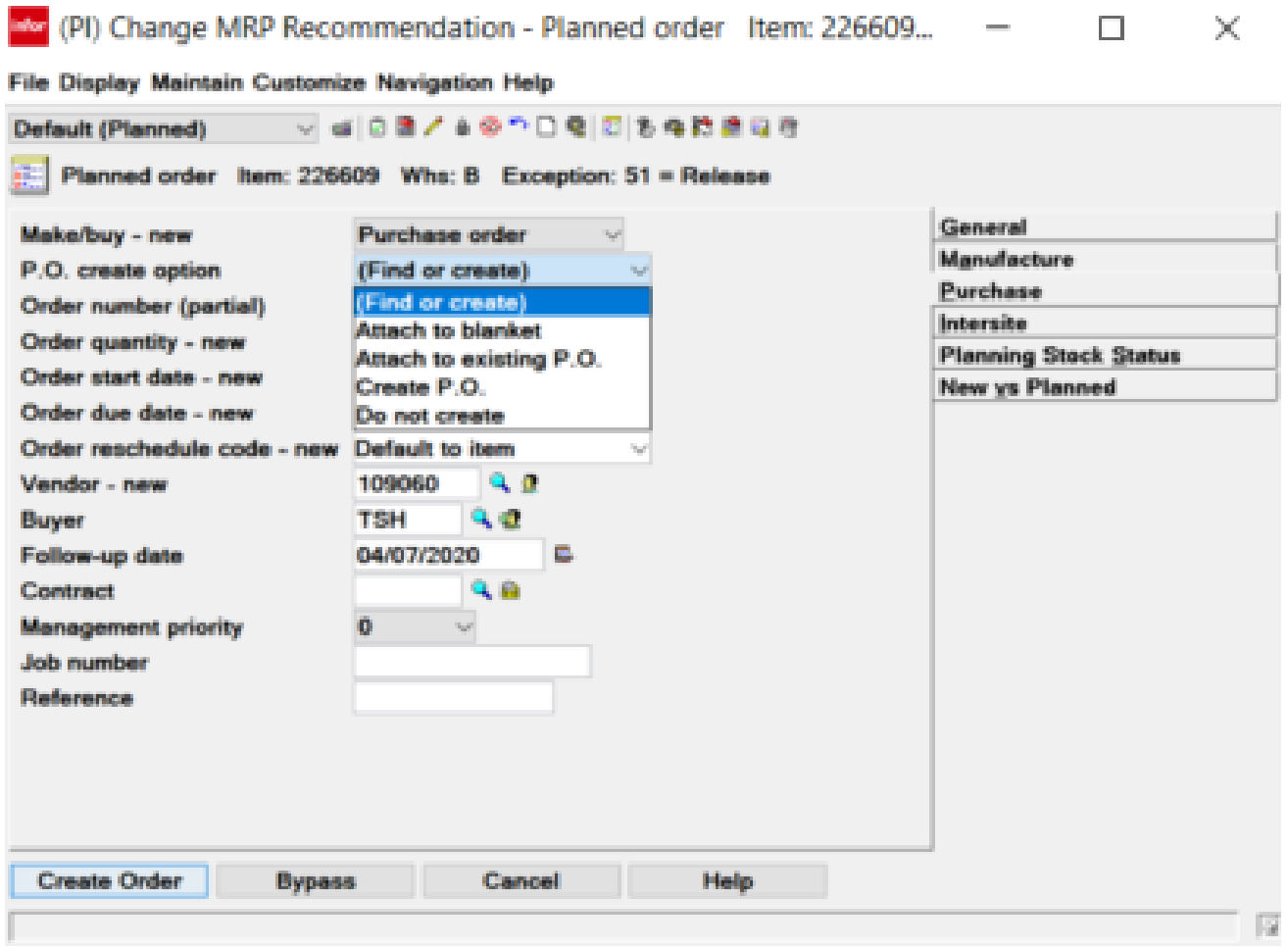
CISTECH
THE INFOR XA EXPERTS

Purchasing Card



CISTECH
THE INFOR XA EXPERTS

Purchase Options



CISTECH
THE INFOR XA EXPERTS

Purchase Options

- Find or Create
  - If an existing blanket PO exists for the item, will add a release to the blanket order
- Attach to Blanket
  - Adds the planned order as a release to an existing blanket
  - Must enter the blanket PO number (without the ‘P’)
- Attach to Existing PO
  - Creates a new item on a PO
  - Must enter the PO number (without the ‘P’)
- Create PO
  - Creates a new PO for the item

Purchase Options

- Only field not available is ‘Purchase Price’
- Purchasing Control File determines the field that holds the default PO price
  - Current Material This Level (from Item Mst/Rev B)
  - Purchase Price (from Item Mst/Rev C)
  - Unit Cost Default (from Item Mst/Rev A)
  - Standard Cost (from Item Bal)
- Default field can be displayed on the card but cannot be entered

Conclusion

- Material Planning is providing more options for reviewing planning recommendations as well as the majority of options in green screen MRP menus
- It doesn’t matter which planning application (MRP, VPI or Thru Put) you’re running, all files that PowerLink uses are updated
- Compare the ‘Planned Activity’ card to the ‘Item Requirements Inquiry’ screen
  - The more you use ‘Planned Activity’ the easier it will become
  - ‘Planned Activity’ has much more information on it